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1940

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UNIV. WICELL CRACOVIENSIS

11 crasop.

#### Vorwort

Vom Jahrgang 1916 an ist der fundamentale Meridian, auf den alle Angaben des Jahrbuchs bezogen sind, der Meridian von Greenwich.

Die Zeit ist vom Jahrgang 1925 an in Welt-Zeit, d. i. Bürgerliche Zeit Greenwich, ausgedrückt (siehe Erläuterungen).

Die Grundlagen des Berliner Astronomischen Jahrbuchs bilden:

Für die Sonne und die großen Planeten:

Die Tafeln von Newcomb und (für Jupiter und Saturn) von Hill, enthalten in:

Astronomical Papers of the American Ephemeris,

Vol. VI, Part I-IV: Tables of the four inner planets,

Vol. VII, Part I-IV: Tables of Jupiter, Saturn,

Uranus, Neptune.

Für Pluto die Elemente von E. C. Bower. (Näheres siehe Erläuterungen.)

Als Sonnenhalbmesser in der mittleren Entfernung ist 16' 1"50 angenommen; dagegen liegt der Berechnung der Finsternisse der von Auwers in A. N., Bd. 128 gegebene Wert 15' 59".63 zugrunde.

Für den Mond:

Tables of the Motion of the Moon by Ernest W. Brown. Der geozentrische Mondhalbmesser  $r_{\mathbb{C}}$  ist aus der Äquatorial-Horizontalparallaxe  $p_{\mathbb{C}}$  gerechnet nach der Formel

$$r_{\rm c} = 0.272469 \, p_{\rm c} + 1.50$$

für die Finsternisse nach sin  $r_{\rm C}=$  0.272274 sin  $p_{\rm C}.$ 

Als Neigung des Mondäquators gegen die Ekliptik ist nach F. Hayn (A. N. Bd. 199, 263) angenommen:  $J = 1^{\circ} 32' 20''$ .

Für die Fixsterne:

Dritter Fundamentalkatalog des Berliner Astronomischen Jahrbuchs (Veröffentlichungen des Astronomischen Rechen-Instituts zu Berlin-Dahlem Nr. 54).

Die Sterngrößen und Sternspektra sind dem »Henry Draper Catalogue (Harvard Annals, vol. 91—99)« entnommen.

Als Werte der fundamentalen Reduktionsgrößen sind angenommen:

Die Präzessions-Größen nach S. Newcomb (vgl. H. Andoyer, Bull. Astr. 28, 67)

Die Nutations-Konstante . . . . 9"21

Die Nutations-Größen nach S. Newcomb (Bull. Astr. 15, 241)

Die Aberrations-Konstante . . . . 20"47

Die Sonnen-Parallaxe . . . . . 8"80

Die Abplattung der Erde . . . . 1:297

Für die Satelliten:

Die Angaben über die 4 älteren Jupitertrabanten beruhen auf den Tafeln von R. A. Sampson (Tables of the four great Satellites of Jupiter. London 1910), die Angaben über die 8 älteren Saturnsatelliten auf den von H. und G. Struve sowie von J. Woltjer ermittelten Werten (Näheres s. Erläuterungen).

In allen Ephemeriden der Sonne, der Planeten und der Fixsterne sind die kurzperiodischen, von der Mondlänge abhängigen Nutationsglieder weggelassen; doch bietet das Jahrbuch die Möglichkeit, auch diese weggelassenen Glieder zu berücksichtigen

(s. Erläuterungen).

Der Inhalt des Jahrbuchs hat gegen das Vorjahr keine wesentlichen Änderungen erfahren, jedoch sei erwähnt, daß in einem Anhang die mittleren Örter und Eigenbewegungen der Zusatzsterne des Dritten Fundamentalkataloges für die Jahre 1940—1943 gegeben sind.

Bezüglich der Zahlengrundlagen sei auf die im Berliner Jahrbuch für 1916 gegebene Darstellung der »Grundbegriffe der Sphä-

rischen Astronomie« hingewiesen.

Ein Teil der Angaben wurde seitens der American Ephemeris and Nautical Almanac, Washington, des Nautical Almanac Office, London, und des Bureau des Longitudes, Paris, zur Verfügung gestellt.

Die Leitung der Arbeiten am Astronomischen Jahrbuch für 1940 lag in den Händen von Prof. Dr. Kohl; an der Bearbeitung der verschiedenen Teile beteiligten sich außerdem die Herren Dr. Müller, Dr. Baehr und mehrere Hilfsarbeiter.

Astronomisches Rechen-Institut

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## Zeit- und Festrechnung 1940

Das Jahr 1940 entspricht dem Jahr 6653 der Julianischen Periode und dem Jahr 7448-7449 der Byzantinischen Ära.

#### Gregorianischer Kalender

Goldene Zahl .												3
Epakte												XXI
Sonnenzirkel .												17
Sonntagsbuchstab	e											$\mathbf{GF}$
g												
Septuagesima .			٠		٠	٠	٠	٠	٠	•	٠	21. Jan.
Aschermittwoch												7. Febr.
I. Quatember .												14. Febr.
Ostersonntag .												24. März
Himmelfahrt												2. Mai
Pfingstsonntag .												12. Mai
II. Quatember.												15. Mai
III. Quatember												18. Sept.
I. Advent												1. Dez.
IV. Quatember												18. Dez.

#### Dimensionen der Erde

#### a) Nach Bessel (1841)

Große Halbachse  $a = 6\,377\,397.155\,\mathrm{m}$  log  $a = 6.804\,6334\,637$ Kleine Halbachse  $b = 6\,356\,078.963\,\mathrm{m}$  log  $b = 6.803\,1892\,839$ Abplattung  $a = 1:299.152\,8129$  log  $a = 7.524\,1069\,092-10$ Meridianquadrant  $= 10\,000\,855.76\,\mathrm{m}$ 

Die Maßeinheit der Länge ist das legale Meter.

#### b) Nach Hayford (1909)

Große Halbachse  $a = 6\,378\,388\,\mathrm{m}$  log  $a = 6.804\,7109\,340$ Kleine Halbachse  $b = 6\,356\,911.946\,\mathrm{m}$  log  $b = 6.803\,2461\,958$ Abplattung a = 1:297 log  $a = 7.527\,2435\,507-10$ Meridianquadrant  $= 10\,002\,288.30\,\mathrm{m}$ 

Die Maßeinheit der Länge ist das internationale Meter.

Ein internationales Meter = 1.000 0133 legales Meter.

Beschleunigung durch die Schwerkraft:

 $g = 980.616 - 2.5928 \cos 2\varphi + 0.0068 \cos^2 2\varphi$  cm. gr. sec. (Helmert 1908)

Masse der Erde: 5.974 · 10<sup>27</sup> gr. Masse der Sonne: 1.983 · 10<sup>33</sup> gr. Radius der Sonne: 695 300 km.

Mittlere Entfernung Erde—Sonne: 149 504 200 km Lichtzeit für die mittlere Entfernung Erde—Sonne: 498?72 (mit Lichtgeschwindigkeit 299 774 km/sec.)

#### Astronomische Konstanten

Allgemeine Präzession $\psi=50.2564$ + 0.000 222 t
Präzession in Rektaszension $m = 3.07234 + 0.0000186 t$
Prāzession in Deklination $n = 20.0468 - 0.000085 t$
Mittlere Schiefe der Ekliptik $\varepsilon=23^{\circ}27'8.26$ — $0.4684$ t Länge d. aufsteig. Knotens d. bewegl. a. d. festen Ekliptik $\varPi=173^{\circ}57'3.6'+32.862$ t
Winkel zwischen fester u. bewegl. Ekliptik $\pi = 0.4711$ — $0.000007$ t
Länge des tropischen Jahres
$\mathbf{t} = \mathbf{Z}\mathbf{e}\mathbf{i}\mathbf{t}$ seit 1900 in julianischen Jahren
Länge des synodischen       Monats       29. d 530 588         """">"""""""""""""""""""""""""""""""
Länge des mittleren Sonnentages = 24 <sup>h</sup> 3 <sup>m</sup> 56.555 Sternzeit = 1.00273791 Sterntag
$L\ddot{a}ngedesmittl.Sterntages = 23^{h}56^{m}4^{s}.091mittl.Zeit = 0.99726957mittl.Sonnentag$
Äquatoreal-Horizontal parallaxe des Mondes
1 Lichtjahr = $63275$ Astr. Einh. = 0.3068 Parsek = $9.460\cdot10^{12}$ km 1 Parsek = $206264.806$ Astr. Einh. = $3.2598$ Lichtjahre = $30.84\cdot10^{12}$ km

### Elemente der Planetenbahnen für 1940 Jan. 0, 0<sup>h</sup> Welt-Zeit

				Ω	i	$\bar{\omega}$		e
				0	0	0		
Merkur				47.620	7.004	76.522	0,20	05622
Venus				76.140	3.394	130.727	0.00	06802
Erde				· — ·		101.909		16734
Mars				49.095	1.850	334.955	0.00	93 3 50
Jupiter				99.848	1.306	13.365	-	48 40 <b>0</b>
Saturn	,			113.140	2.491	91.882	0.0	55754
Uranus				73.677	0.773	172.142		16 334
Neptun				131.121	1.775	47.297	0,00	0000
Pluto				109.633	17.144	223.175		48644
					7	42	r	)
				a	L	$n_{sid}$ .	F	aid.
				a	$_{\circ}^{L}$	$n_{sid}$ .		sid,
Merkur				0.387099	201.669	4.09234	o	87.9693
Venus					0	0	o	4
Venus Erde			•	0.387099	201.669	4.09234	o	87.9693
Venus Erde			•	0.387099 0.723331	201.669 348.049	0 4.09234 1.60213	0 0 2 I	87.9693 224.7008 0.0142
Venus		   		 0.387099 0.723331 1.000000	201.669 348.049 98.526	6 4.09234 1.60213 0.98561	0 0 2 I I 3	87.9693 224.7008
Venus		   		 0.387099 0.723331 1.000000 1.523688 5.202561	201.669 348.049 98.526 29.641 12.446	0 4.09234 1.60213 0.98561 0.52403 0.08309	0 0 2 I I 3 II 3	87.9693 224.7008 0.0142 321.7375 314.925
Venus		   		 0.387099 0.723331 1.000000 1.523688 5.202561 9.554747	201.669 348.049 98.526 29.641 12.446 35.918	0 4.09234 1.60213 0.98561 0.52403 0.08309 0.03346	0 0 2 I I 3 II 3 29 I	87.9693 224.7008 0.0142 321.7375 314.925 167.21
Venus		 		 0.387 099 0.723 331 1.000 000 1.523 688 5.202 561 9.554 747 19.218 14	201,669 348.049 98.526 29.641 12.446 35.918 56.125	0 4.09234 1.60213 0.98561 0.52403 0.08309 0.03346 0.01173	0 0 2 I I 3 1 I 3 29 I 84	87.9693 224.7008 0.0142 321.7375 314.925 167.21 8.11
Venus		 		 0.387099 0.723331 1.000000 1.523688 5.202561 9.554747	201.669 348.049 98.526 29.641 12.446 35.918	0 4.09234 1.60213 0.98561 0.52403 0.08309 0.03346	0 0 2 1 1 3 11 3 29 1 84 164 2	87.9693 224.7008 0.0142 321.7375 314.925 167.21

Merkur bis Mars nach Newcomb, Jupiter bis Neptun nach Leverier und Gaillot, Pluto nach Bower. Für Pluto sind baryzentrische Elemente bezogen auf Ekliptik und mittleres Äquinoktium 1950.0 gegeben.

## Astronomische Zeichen und Abkürzungen

Bezeichnung	Adspekten
der	d Konjunktion
Wochentage	Quadratur
⊙ Sonntag	& Opposition
( Montag	
♂ Dienstag	Mondphasen
♥ Mittwoch	<ul><li>Neumond</li></ul>
4 Donnerstag	) Erstes Viertel
♀ Freitag	O Vollmond
5 Sonnabend	( Letztes Viertel
Ω Aufsteigen	S K HOLEH

#### Zeichen

ਲ Absteigender

# des Tierkreises und der Himmelskörper

Υ	Widder			0	Grad		
8	Stier .			30	<b>»</b>	$\odot$	Sonne
I	Zwillinge			60	<b>»</b>	(	Mond
9	Krebs .			90	<b>»</b>	ğ	Merkur
$\Omega$	Löwe .			120	<b>»</b>	φ	Venus
mp	Jungfrau			150	*	ż	Erde
<u>Q</u>	Waage			180	<b>»</b>	ð	Mars
m	Skorpion			210	»	24	Jupiter
X	Schütze	٠.		240	<b>»</b>	ħ	Saturn
8	Steinbook	k		270	<b>»</b>	ô	Uranus
222	Wasserm	anı	1	300	<b>»</b>	Ψ	Neptun
¥	Rische			330	»		

# Sonne, Mond, Große Planeten 1940

	60	<del></del>	Oh We	lt-Zeit		
Tag	Wochentag	Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer StZt.	Halb- messer
1940		124				
Jan. o	St	- 2 28.98	18 36 34.30 #	-23 10 42.5	71.13	16 17.85
1	Mo	2 57.82 28.84	T8 40 50.70 4 25.40	23 6 36.5	71.09	16 17.85
2	Di	3 26.41 28.30	18 45 24.85 4 25.15 4 24.85	23 2 2.8 + 33./	71.05	16 17.86
3	Mi	3 54.71 27.98	18 49 49.70 4 24.54	22 57 1.5 5 28.8	71.01	16 17.86
4	Do	4 22.69 27.63	18 54 14.24	22 51 32.7 5 56.1	70.97	16 17.85
5	Fr	4 50.32 27.25	18 58 38.43 4 23.80	22 45 36.6 6 23.2	70.91	16 17.84
6	Sa	- 5 17.57 <sub>26.83</sub>	TO 2 2.22	-22 39 13.4 <sub>6 50.2</sub>	70.85	16 17.83
0-7	St	5 44.40 26.38	19 7 25.62 4 23.39	22 32 23.2 7 16.9	70.79	16 17.81
8	Mo	6 10.78	19 11 48.57 4 22.46	22 25 6.3 7 43.4	70.73	16 17.78
9	Di	6 36.69 25.40	19 16 11.03 4 21.96	22 17 22.9 8 9.6	70.67	16 17.76
10	Mi	7 2.09 24.86	19 20 32.99 4 21.41	22 9 13.3 8 35.7	70.59	16 17.73
11	Do	7 26.95 24.29	19 24 54.40 4 20.85	22 0 37.6 9 1.4	70.52	16 17.69
12	Fr	- 7 51.24 <sub>23.70</sub>	19 29 15.25 4 20.26	−21 51 36.2 <sub>9 27.0</sub>	70.44	16 17.65
13	Sa	8 14.94	19 33 35.51 4 19.64	21 42 9.2 9 52.2	70.36	16 17.61
14	St	8 38.03 22.44	19 37 55.15 4 19.00	21 32 17.0 9 52.2	70.27	16 17.56
15	Mo	9 0.47	19 42 14.15 4 18.33	21 21 59.9 10 41.8	70.19	16 17.51
16	Di	9 22.24 21.09	19 46 32.48 4 17.65	21 11 18.1	70.10	16 17.46
17	Mi	9 43.33 20.39	19 50 50.13 4 16.94	21 0 12.1	70.00	16 17.40
18	Do	-10 3.72 <sub>19.67</sub>	19 55 7.07 4 16.23	-20 48 42.0 II 53.8	69.91	16 17.34
19	Fr	10 23.39 18.03	19 59 23.30 4 15.48	20 30 48.2	69.81	16 17.27
20	Sa	10 42.32 18.18	20 3 38.78 4 14.74	20 24 31.1	69.71	16 17.19
21	St	11 0.50	20 7 53.52 4 13.97	20 11 50.9	69.61	16 17.11
22	Mo	11 17.92 16.65	20 12 7.49 4 13.20	19 58 48.0 13 25.3	69.51	16 17.03
23	Di	11 34.57 15.87	20 16 20.69 4 12.43	19 45 22.7 13 47.2	69.40	16 16.94
24	Mi	-11 50.44 <sub>15.08</sub>	20 20 33.12 4 11.64	-19 31 35.5 <sub>14 9.0</sub>	69.30	16 16.84
25	Do	12 5.52 14.29	20 24 44.76	19 17 26.5	69.19	16 16.74
26	Fr	12 19.81	20 28 55.61 4 10.06	19 2 56.3 14 51.2	69.08	16 16.63
27	Sa	12 33.32 12.71	20 33 5.67 4 9.27	18 48 5.1 15 11.8	68.96	16 16.51
28	St	12 46.03 11.92	20 37 14.94 4 8.47	18 32 53.3 15 32.0	68.85	16 16.39 16 16.26
29	Mo	12 57.95 11.13	20 41 23.41 4 7.68	18 17 21.3 15 51.9	68.74	
30		-13 9.08 <sub>10.33</sub>	20 45 31.09 4 6.89	-18 I 29.4 <sub>16 II.3</sub>	68.63	16 16.13
31	_	13 19.41 9.53	20 49 37.98 4 6.08	17 45 18.1	68.51	16 16.00
Febr. 1	-	13 28.94 8.73	20 53 44.06	1 17 20 47.7	68.40	16 15.85
2	1 ~	13 37.07	20 57 49.35 4 4.49	17 11 50.7 17 7.3	68.28 68.16	16 15.70
3	1 01	13 45.61 7.13	21 1 53.84 4 3.69	1 20 34 31.4	68.05	16 15.56
4		13 52.74 6.33	21 5 57.53 2.89	16 37 26.3 17 42.5		16 15.40
5	Mo	-13 59.07 <sub>5.53</sub>	21 10 0.42	-16 19 43.8 <sub>17 59.5</sub>	67.93	16 15.24
6	1	14 4.60	21 14 2.50	16 I 44.3 79 16.0	67.82	16 15.08
. 7	Mi	14 9.33 3.92	21 18 3.78 4 0.48	15 43 28.3 78 12 2	67.71	16 14.92
8	77	14 13.25	21 22 4.26	15 24 56.1 18 47.0	67.59	16 14.75
- <u>ç</u>		14 16.38 2.32	21 20 3.94 3 58.88	15 0 8.2	67.48	16 14.58
10	Sa	-14 18.70	21 30 2.82	<del>-14 47 5.0</del>	67.37	16 14.41

		-	0 h	Welt-Zeit			Auf-	Unter-
Tag	Ju <b>lia</b> n. Zeit	Sternzeit	Nutation in AR. langp. kurzp. Gl. Gl.	Mittleres Äquinok 1940.0 Länge	tium Breite	$\log R$	gang in (+5)	gang o° Breite o <sup>h</sup> Länge
1940	2429		in 0.001		in o.or			
Jan.	628.5	6 34 5.323	+488 + 8	278 24 10.9 61 86	-33	9.992 6791	7 59	16 7
1	1 -	6 38 1.880	490 + 3	270 25 10 5	-22	0.000.6750	7 59	16 8
2	-	6 41 58.437	492 - 2	280 26 28.5	-10	$9.9926730$ $9.9926733$ $\frac{17}{6}$	7 59	16 9
3		6 45 54.995	494 - 6	28T 27 27 0	+ 4	0.002 6720	7 59	16 10
4		6 49 51.552	496 - 8	282 28 47.7 61 10.1	+18	0.002 6766	7 58	16 11
5		6 53 48.109	497 - 8	283 29 57.8 61 10.1	+31	9.992 6813 47	7 58	16 12
6	634.5	6 . 57 44.666	+499 - 5	284 31 8.0 61 10.4	+44	9.992 6880 85	7 58	16 13
7		7 1 41.223	501 - 2	285 32 18.4 61 104	+54	9.992 6965	7 58	16 14
8		7 5 37.780	502 + 3	286 33 28.8 61 10.3	+6 <b>1</b>	9.992 7067	7 57	16 15
9	0.0	7 9 34-337	504 + 7	287 34 39.1 61 10.1	+66	9.992 7186	7 57	16 17
10	.0 5	7 13 30.894	506 +10	288 35 49.2 61 0.8	+68	9.992 7321	7 56	16 18
11	639.5	7 17 27.451	507 +11	289 36 59.0 61 9.5	+67	9.992 7473 169	7 56	16 19
12		7 21 24.007	+508 +11	290 38 8.5 61 9.1	+64	9.992 7642 187	7 55	16 20
13	641.5	7 25 20.564	510 + 9	291 39 17.6 61 8.5	+59	9.992 7829	7 55	16 22
14		7 29 17.121	511 + 5	292 40 26.1 61 7.9	+52	9.992 8034	7 54	16 23
15		7 33 13.677	512 0	293 41 34.0 61 7.3	+42	9.992 8257 243	7 54	16 25
16	1	7 37 10.234	513 - 5	294 42 41.3 61 6.5	+31	9.992 8500 263	7 53	16 26
17		7 41 6.790	515 - 9	295 43 47.8 61 5.8	+19	9.992 8763 283	7 52	16 28
18		7 45 3.347	+515 -13	296 44 53.6 61 5.0	+ 7	9.992 9046 306	7 51	16 29
19		7 48 59.903	516 -15	297 45 58.6 61 4 I	- 5	9.992 9352 329	7 51	16 31
20		7 52 56.459	517 -14	298 47 2.7 61 3.2	-17	9.992 9681 353	7 50	16 32
21	649.5	7 56 53.015	518 -11	299 48 5.9 61 2.3	-27	9.993 0034 378	7 49	16 34
22	0 0	8 0 49.571	518 - 5	300 49 8.2 61 1.5	-34	9.993 0412 405	7 48	16 36
23	651.5	8 4 46.127	519 + 1	301 50 9.7 61 o.6	-39	9.993 0817 432	7 47	16 37
24		8 8 42.683	+519 + 6	302 51 10.3 60 59.7	-42	9.993 1249 459	7 45	16 39
25		8 12 39.238	520 + 9	303 52 10.0 60 58 0	-41	9.993 1708 487	7 44	16 40
26	0.0	8 16 35.794	520 +11	304 53 8.9 60 58.2	-37	9.993 2195 515	7 43	16 42
27	000	8 20 32.350	520 + 9	305 54 7.1 60 57.5	-29	9.993 2710 541	7 42	16 44
28		8 24 28.905	520 + 5	300 55 4.0 60 56.8	-19	9.993 3251 566	7 41	16 45
29	0.0	8 28 25.460	520 0	307 56 1.4 60 56.2	- 7	9.993 3817 590	7 39	16 47
30	658.5	8 32 22.015	+520 - 4	308 56 57.6 60 55.5	+ 5	9.993 4407 613	7 38	16 48
31		8 36 18.571	520 - 7	309 57 53.1 60 54.8	+19	9.993 5020 633	7 37	16 50
Febr. 1		8 40 15.126	520 - 7	310 58 47.9 60 54.1	+33	9.993 5653 652	7 36	16 52
2	661.5	8 44 11.681	520 - 6	311 59 42.0 60 53.3	+45	9.993 6305 670	7 34	16 54
3		8 48 8.236	519 - 2	313 0 35.3 60 12.4	+55	9.993 6975 687	7 33	16 55
4		8 52 4.790	518 + 3	314 1 27.7 60 51.5	+62	9.993 7662 701	7 31	16 57
5		8 56 1.345	+517 + 7	315 2 19.2 60 50.6	+67	9.993 8363 715	7 30	16 59
6	00	8 59 57.899	516 +10	310 3 9.0 60 40.5	+70	9.993 9078 729	7 28	17 1
7		9 3 54.454	515 +12	317 3 59.3 60 48.3	+69	9.993 9807 742	7 27	17 3
8		9 7 51.008	514 +11	318 4 47.6 60 47.1	+66	9.994 0549 753	7 25	17 4
9		9 11 47.562	513 +10	319 5 34.7 60 45 7	+61	9.994 1302 766	7 24	17 6
10	1 009.5	9 15 44.116	T512 + 0	320 6 20.4	+53	9.994 2068	7 22	17 8

	age		Oh Welt-Zeit									
Tag	Wochentag	Zeitgleichung Wahre Zeit <i>minus</i> Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer StZt.	Halb- messer						
1940			I for many			2 2						
Febr. 10	Sa	14 18.70 s	21 30 2.82 m 8	-14 47 5.0 10 18 I	67.37	16 14.41						
II	St	14 20.23	21 34 0.01	14 27 46.0	67.26	16 14.23						
12	Mo	14 20.98 0.75	21 37 58.21 3 57.30 3 56.51	14 8 14.5 19 32.4	67.15	16 14.06						
13	Di	14 20.95 0.81	21 41 54.72	13 48 28.0	67.04	16 13.88						
14	Mi	14 20.14	21 45 50.47 3 54.97	13 28 28.0 20 13.2	66.93	16 13.69						
15	Do	14 18.56 2.34	21 49 45.44 3 54.22	13 8 14.8 20 25.9	66.82	16 13.51						
16	Fr	-14 16.22 <sub>3.08</sub>	21 53 30.66	$-12\ 47\ 48.9\ _{20\ 38.2}$	66.72	16 13.32						
17	Sa	14 13.14 3.82	21 57 33.13 3 53.47	12 27 10.7 20 50.1	66.61	16 13.13						
18	St	14 9.32 4.54	22 1 25.87 3 52.01	12 6 20.6	66.51	16 12.93						
19	Mo	14 4.78 5.25	22 5 17.88 3 51.30	11 45 19.0 21 12.6	66.41	16 12.73						
20	Di	13 59.53	22 9 9.18 3 50.61	II 24 6.4 <sub>21 23.3</sub>	66.31	16 12.52						
21	Mi	13 53.58 6.62	22 12 59.79 3 49.93	II 2 43.I <sub>21 33.5</sub>	66.21	16 12.32						
22	Do	$-13\ 46.96$	22 16 49.72 3 49.28	-10 41 9.6 <sub>21 43.5</sub>	66.12	16 12.11						
23	Fr	13 39.68 7.91	22 20 39.00 3 49.28	10 19 26.1 21 52.9	66.03	16 11.89						
24	Sa	13 31.77 8.52	22 24 27.64 2 48 02	9 57 33.2 22 2,1	65.94	16 11.67						
25	St	13 23.25 9.12	22 28 15.67 3 47.43	9 35 31.1 22 10.8	65.85	16 11.44						
26	Mo	13 14.13 9.69	22 32 3.10 3 46.86	9 13 20.3 22 19.2	65.76	16 11.21						
27	Di	13 4.44 10.25	22 35 49.96 3 46.31	8 51 I.I <sub>22 27.1</sub>	65.68	16 10.97						
28	Mi	-12 54.19 <sub>10.77</sub>	22 39 36.27 3 45.78	- 8 28 34.0 <sub>22 34.7</sub>	65.59	16 10.73						
29	Do	12 43.42 11.29	22 43 22.05 3 45.26	8 5 59.3 22 41.9	65.51	16 10.49						
März 1	Fr	12 32.13 11.79	22 47 7.31 3 44.77	7 43 17.4 22 48.7	65.44	16 10.25						
2	Sa	12 20.34 12.26	22 50 52.08 2 44.28	7 20 28.7 22 55.0	65.37	16 10.00						
3	St	12 8.08	22 54 36.36 2 42 82	6 57 33.7 23 1.0	65.30	16 9.75						
4	Mo	11 55.36 13.17	22 58 20.19 3 43.39	6 34 32.7 23 6.5	65.22	16 9.50						
5	Di	-11 42.19 <sub>13.60</sub>	23 2 3.58 3 42.95	- 6 II 26.2 23 II.7	65.16	16 9.25						
6	Mi	11 28.59 14.01	23 5 46.53 3 42.54	5 48 14.5 22 16 5	65.09	16 8.99						
7	Do	11 14.58 14.41	23 9 29.07 3 42.15	5 24 58.0 23 20.8	65.03	16 8.74						
8	Fr	11 0.17 14.78	23 13 11.22 3 41.77	5 I 37.2 23 24.7	64.98	16 8.48						
9	Sa	10 45.39 15.15	23 16 52.99 3 41.40	4 38 12.5 23 28.3	64.92	16 8.22						
10	St	10 30.24 15.49	23 20 34.39 3 41.06	4 14 44.2 23 31.5	64.87	16 7.97						
11	Mo	—ro 14.75 <sub>15.82</sub>	23 24 15.45 3 40.74	$-35112.7_{2334.3}$	64.82	16 7.71						
12	Di	9 58.93 16.12	23 27 56.19 2 40.42	3 27 38.4 23 36.6	64.77	16 7.45						
13	Mi	9 42.81 16.42	23 31 36.61	3 4 1.8 23 38.6	64.73	16 7.19						
14	Do	9 26.38 16.70	23 35 16.74 2 20 85	2 40 23.2	64.69	16 6.93						
15	Fr	9 9.68 16.05	23 30 50.59 2 20.60	2 10 42.9 23 41.4	64.65	16 6.68						
16	Sa	8 52.73 17.20	23 42 36.19 3 39.36	1 53 1.5 23 42.3	64.62	16 6.41						
17	St	-835.53	23 46 15.55 3 39.14	- I 29 19.2	64.59	16 6.15						
18	Mo	0 10.12 17.61	23 49 54.69 3 38.93	I 5 36.4	64.56	16 5.89						
19	Di	8 0.51 17.80	23 53 33.02 3 38.76	41 53.5 22 42 7	64.53	16 5.62						
20	Mi	7 42.71 17.04	23 57 12.38 2 28.60	0 10 10.0 22 42 0	64.51	16 5.35						
21	Do	7 24.77 18.08	0 0 50.98 2 28 48	+ 0 5 31.2 23 41.2	64.49	16 5.09						
22	Fr	— 7 6.69	0 4 29.46	+ 0 29 12.4	64.48	16 4.82						

			0ъ	Welt-Zeit			Auf-	Unter-
Tag	Julian Zeit	Sternzeit	Nutation in AR. langp. kurzp. Gl. Gl.	Mittleres Äquinok 1940.0 Länge	tium Breite	$\log R$	gang in {+5	gang o°Breite o <sup>h</sup> Länge
1940	2429	h m s	in c.001	0 / "	in o.o1		h m	h m
Febr.10	669.5	9 15 44.116	+512 + 6	320 6 20.4 60 44.4	+53	9.994 2068 780	7 22	17 8 m
11	670.5	9 19 40.671	511 + 2	321 7 4.8 60 42.9	+43	9.994 2848	7 20	17 10
12	671.5	9 23 37.225	509 - 3	322 7 47·7 60 41.4	+32	9.994 3639 804	7 18	17 11
13	672.5	9 27 33.778	508 – 8	323 8 29.1 60 30.8	+20	9.994 4443 817	7 17	17 13
14	673.5	9 31 30.332	506 -12	324 9 8.9 60 38.1	+ 7	9.994 5260 822	7 15	17 14
15	674.5	9 35 26.886	504 -14	325 9 47.0 <sub>60 36.4</sub>	- 5	9.994 6092 845	7 13	17 16
16	675.5	9 39 23.439	+503 -14	326 10 23.4 60 34.7	-17	9.994 6937 860	7 11	17 18
17	676.5	9 43 19.993	501 -12	327 10 58.1 60 32.0	-27	9-994 7797 876	7 9	17 20
18	677.5	9 47 16.546	499 – 8	328 11 31.0 60 31.0	-35	9.994 8673 894	7 8	17 21
19	678.5	9 51 13.099	497 - 3	329 12 2.0 60 29.2	-40	9.994 9567 913	7 6	17 23
20	679.5	9 55 9.653	494 + 3	330 12 31.2 60 27.5	-43	9.995 0480	7 4	17 25
21	680.5	9 59 6.206	492 + 7	331 12 58.7 60 25.6	-42	9.995 1410 951	7 2	17 27
22	681.5	10 3 2.759	+490 ÷10	332 13 24.3 60 24.0	-39	0.005 2361	7 0	17 28
23	682.5	10 6 59.311	487 + 9	333 13 48.3 60 22.2	-33	9.995 3333 993	6 58	17 30
24	683.5	10 10 55.864	485 + 6	334 14 10.5 60 20.6	-23	9.995 4326 1012	6 56	17 31
25	684.5	10 14 52.417	482 - 2	335 14 31.1 60 19.1	-11	9.995 5338	6 54	17 33
26	685.5	10 18 48.970	480 - 3	336 14 50.2 60 17.6	+ 3	9.995 6370	6 52	17 35
27	686.5	10 22 45.522	477 - 6	337 15 7.8 60 16.1	+17	9.995 7420 1067	6 50	17 37
28	687.5	10 26 42.075	+474 - 7	338 15 23.9 60 14.6	+30	9.995 8487 1082	6 48	17 38
29	688.5	10 30 38.628	471 - 6	339 15 38.5 60 13.2	+42	9.995 9569 1096	6 46	17 40
März 1	689.5	10 34 35.180	468 - 3	340 15 51.7 60 11.7	+53	9.996 0665	6 44	17 42
2	690.5	10 38 31.732	465 + 2	341 16 3.4 60 10.1	+62	9.996 1771	6 42	17 44
3	691.5	10 42 28.285	462 + 6	342 16 13.5 60 8.7	+67	9.996 2887 1126	6 40	17 45
4	692.5	10 46 24.837	459 +10	343 16 22.2 60 7.0	+70	9.996 4013	6 38	17 47
5	693.5	10 50 21.389	+456 +12	344 16 29.2 60 5.3	+69	9.996 5146 1138	6 36	17 48
6	694.5	10 54 17.941	453 +12	345 16 34.5 60 3.6	+66	9.996 6284 1143	6 34	17 50
7	695.5	10 58 14.493	449 +11	346 16 38.1 60 1.9	+61	9.996 7427	6 32	17 52
8	696.5	11 2 11.045	446 + 8	347 16 40.0 60 0.0	+53	9.996 8574	6 30	17 53
9	697.5	11 6 7.597	443 + 4	348 16 40.0 50 58.1	+43	9.996 9725	6 27	17 55
10	698.5	11 10 4.149	439 - 1	349 16 38.1 <sub>59 56.1</sub>	+32	9.997 0880	6 25	17 56
11	699.5	11 14 0.701	+436 - 6	350 16 34.2	+20	9.997 2037 1161	6 23	17 58
12	700.5	11 17 57.253	432 -10	351 16 28.3 59 54.1 59 52.0	+ 6	9.997 3198 1163	6 21	18 0
13	701.5	11 21 53.805	429 -13	352 16 20.3 59 49.9	- 7	9.997 4361 1166	6 19	18 I
14	702.5	11 25 50.357	425 -14	353 16 10.2 59 47.7	-19	9.997 5527 1169	6 16	18 3
15	703.5	11 29 46.909	422 -13	354 15 57·9 59 45·5	-30	9.997 6696	6 14	18 4
16	704.5	11 33 43.460	418 –10	355 15 43.4 <sub>59 43.2</sub>	-39	9.997 7870	6 12	18 6
17	705.5	11 37 40.012	+415 - 5	356 15 26.6 59 40.9	-45	9.997 9047 1183	6 10	18 8
18	706.5	11 41 36.564	411 0	357 15 7.5 59 38.6	-48	9.998 0230 1190	6 8	18 9
19	707.5	11 45 33.116	407 + 5	358 14 46.1 59 36.3	-49	9.998 1420 1197	6 6	18 11
20	708.5	11 49 29.667	404 + 8	359 14 22.4 50 24 1	-46	9.998 2617 1206	6 4	18 12
21	709.5	11 53 26.219	400 + 8	0 13 50.5 50 21.8	-39	9.998 3823 1216	6 2	18 14
22	710.5	11 57 22.771	+396 + 6	1 13 28.3	<u>-30</u>	9.998 5039	6 0	18 16

	50	Ob Welt-Zeit									
Tag	Wochentag	Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer StZt.	Halb- messer					
1940		m a	h m a	0 , "		, .					
März 22	Fr	-7 6.69 <sub>18 10</sub>	0 4 29.46	+ 0 29 12.4 23 39.8	64.48	16 4.82					
23	Sa	6 48.50 18.27	0 8 7.82 3 38.28	0 52 52.2 23 38.2	64.47	16 4.54					
24	St	6 30.23 18.33	0 11 46.10 3 38.23	1 16 30.4 23 36.2	64.46	16 4.27					
25	Mo	6 11.90 18.36	0 15 24.33 3 38.19	1 40 6.6 23 34.0	64.45	16 4.00					
26	Di	5 53.54 18.36	0 19 2.52 3 38.19	2 3 40.6 23 31.4	64.44	16 3.72					
27	Mi	5 35.18 18.35	0 22 40.71 3 38.20	2 27 12.0 23 28.3	64.44	16 3.43					
28	Do	-5 16.83 <sub>18.31</sub>	0 26 18.91 3 38.24	+ 2 50 40.3 23 25.1	64.44	16 3.15					
29	Fr	4 58.52 18.25	0 29 57.15 3 38.30	3 14 5.4 23 21.5	64.44	16 2.87					
30	Sa	4 40.27 18.17	0 33 35.45 3 38.38	3 37 26.9 23 17.5	64.45	16 2.59					
31	St	4 22.10 18.07	0 37 13.83 3 38.48	4 0 44.4 23 13.1	64.46	16 2.31					
April 1	Mo	4 4.03 17.06	0 40 52.31 3 38.60	4 23 57.5 23 8.4	64.48	16 2.02					
2	Di	3 46.07 17.82	0 44 30.91 3 38.74	4 47 5.9 23 3.3	64.50	16 1.74					
3	Mi	$-3 28.25_{17.66}$	0 48 9.65 3 38.89	+ 5 10 9.2 22 57.9	64.52	16 1.46					
4	Do	3 10.59 17.50	0 51 48.54 3 39.05	5 33 7.1 22 52.1	64.54	16 1.18					
5	Fr	2 53.09 17.31	0 55 27.59 2 20 24	5 55 59.2 22 45.9	64.56	16 0.90					
. 6	Sa	2 35.78 17.11	0 59 6.83 3 39.44	6 18 45.1 22 39.5	64.59	16 0.62					
7	St	2 18.67 16.89	1 2 46.27 3 39.66	6 41 24.6 22 32.6	64.62	16 0,34					
8	Mo	2 1.78 16.67	I 6 25.93 3 39.89	7 3 57.2 22 25.5	64.65	16 0.06					
9	Di	-1 45.11 <sub>16.42</sub>	1 10 5.82 3 40.13	+ 7 26 22.7 22 17.8	64.69	15 59.79					
10	Mi	1 28.69 16.16	I 13 45.95 3 40.39	7 48 40.5 22 10.0	64.73	15 59.52					
rr	Do.	1 12.53 15.89	I 17 26.34 3 40.66	8 10 50.5 22 1.7	64.77	15 59:25					
12	Fr	0 56.64 15.60	1 21 7.00 3 40.95	8 32 52.2 21 53.0	64.81	15 58.98					
13	Sa	0 41.04 15.31	I 24 47.95 3 41.25	8 54 45.2 21 44.1	64.85	15 58.72					
14	St	0 25.73 14.99	I 28 29.20 3 41.56	9 16 29.3 21 34.8	64.90	15 58.46					
15	Mo	—о 10.74 <sub>14.67</sub>	1 32 10.76 3 41.89	+ 9 38 4.1 21 25.2	64.95	15 58.19					
16	Di	+0 3.93 14 22	I 35 52.65 3 42.23	9 59 29.3 21 15.1	65.00	15 57.92					
17	Mi	0 18.25	I 39 34.88 3 42.58	10 20 44.4 21 4.8	65.05	15 57.66					
18	Do	0 32.22	I 43 17.46 3 42.96	10 41 49.2 20 54.2	65.11	15 57.41					
19	Fr	0 45.81 13.20	I 47 0.42 3 43.35	II 2 43.4 <sub>20 43.3</sub>	65.17	15 57.15					
20	Sa	0 59.01 12.80	I 50 43.77 <sub>3 43.76</sub>	II 23 26.7 20 31.9	65.23	15 56.89					
21	St	+1 11.81	I 54 27.53 3 44.18	+11 43 58.6 20 20.4	65.29	15 56.63					
22	Mo	1 24.18	1 58 11.71	12 4 19.0	65.36	15 56.37					
23	Di	1 36.11 11.47	2 I 56.33 3 45.09	12 24 27.4 10 76 2	65,42	15 56.12					
24	Mi	I 47.58 10.00	2 3 41.42 3 45.56	12 44 23.7 10 42.7	65.49	15 55.86					
25	Do	1 58.57 10.50	2 9 20.98 2 16.06	1 13 4 / 4	65.56	15 55.60					
26	Fr	2 9.07 9.99	2 13 13.04 3 46.56	13 23 38.3 19 17.8	65.63	15 55-35					
27	Sa	+2 19.06	2 16 59.60 3 47.07	+13 42 56.1	65.70	15 55.09					
28	St	2 28.54 8.94	2 20 46.67 3 47.61	14 2 0.3 18 50 5	65.78	15 54.84					
29	Mo	2 37.48 8.42	2 24 34.28 2 48 14	14 20 50.8 18 26.4	65.85	15 54-59					
30	Di	2 45.90 7.87	2 28 22.42 3 48.69	14 39 27.2 18 21 0	65.93	15 54-34					
Mai 1	Mi	<sup>2</sup> 53.77 <sub>7.32</sub>	2 32 11.11	14 57 49.1 18 7.2	66.00	15 54.09					
2	Do	+3 1.09	2 36 0.34 3 49.23	+15 15 56.3	66.08	15 53.85					

- 41			Оь 7	Welt-Zeit			Auf-	Unter-
Tag	Julian. Zeit	Sternzeit	Nutation in AR. langp, kurzp Gl. Gl.	Mittleres Äquinok 1940.0 Länge	tium Breite	log R	gang in {+5	gang o°Breite o <sup>h</sup> Länge
1940	2429		in 0.001	200	in o.or			
März 22	710.5	11 57 22.771	+396 + 6	1 13 28 3 50 20 6	-30	9.998 5039 1225	6 o	18 16 m
23	711.5	12 1 19.322	393 + 2	2 12 57 0	-20	9.998 6264 1236	5 58	18 17
24	712.5	12 5 15.874	389 - 2	3 T2 25.5	- 7	9.998 7500 1245	5 55	18 19
25	713.5	12 9 12.426	386 - 6	4 II 51.0 59 23.6	+ 7	9.998 8745	5 53	18 20
26	714.5	12 13 8.978	382 - 8	5 11 14.6 59 21.7	+22	9.999 0000 1262	5 51	18 22
27	715.5	12 17 5.529	378 - 8	6 10 36.3 59 19.9	+35	9.999 1262	5 49	18 24
28	716.5	12 21 2.081	+375 - 5	7 9 56.2 59 18.1	+46	9.999 2532 1274	5 47°	18 25
29	717.5	12 24 58.633	371 0	8 9 14.3 50 16.3	÷54	9.999 3806 1278	5 44	18 27
30	718.5	12 28 55.185	368 + 5	9 8 30.6 59 14.6	+61	9.999 5084 1278	5 42	18 28
31	719.5	12 32 51.737	364 +10	10 7 45.2 50 12.8	+65	9.999 6362	5 40	18 30
April 1	720.5	12 36 48.289	361 +12	11 6 58.0 59 11.0	+66	9.999 7641 1278	5 38	18 31
2	721.5	12 40 44.841	357 +14	12 6 9.0 59 9.2	+63	9.999 8919	5 36	18 33
3	722.5	12 44 41.393	+354 +12	13 5 18.2 59 7.4	+58	0.000 0194	5 33	18 34
4	723.5	12 48 37.945	351 + 9	14 4 25.6 59 5.5	+-50	0.000 1465	5 31	18 36
5	724.5	12 52 34.497	347 + 5	15 3 31.1 59 3.6	+41	0.000 2730 1260	5 29	18 37
6	725.5	12 56 31.049	344 + 1	16 2 34.7 50 1.7	+30	0.000 3990 1252	5 27	18 39
7	726.5	13 0 27.601	341 - 4	17 1 36.4 68 50.7	+17	0.000 5242 1246	5 25	18 40
8	727.5	13 4 24.153	338 - 8	18 0 36.1 58 57.6	+ 4	0.000 6488	5 22	18 42
9	728.5	13 8 20.705	+335 -11	18 59 33.7 58 55.6	- 9	0.000 7725 1229	5 20	18 43
10	729.5	13 12 17.258	332 -13	19 58 29.3 58 53.5	-22	0.000 8954 1221	5 18	18 45
11	730.5	13 16 13.810	329 -12	20 57 22.8 58 51.3	-35	0.001 0175 1212	.5 16	18 47
12	731.5	13 20 10.363	326-10	21 56 14.1 58 49.0	-44	0.001 1387 1204	5 14	18 48
13	732.5	13 24 6.915	323 - 6	22 55 3.I <sub>58 46.9</sub>	-52	0.001 2591 1197	5 12	18 50
14	733.5	13 28 3.468	320 - 1	23 53 50.0 58 44.6	-56	0.001 3788	5 10	18 51
15	734.5	13 32 0.020	+317 + 3	24 52 34.6 58 42.3	-57	0.001 4979 1184	5 8	18 53
16	735.5	13 35 56.573	315 + 7	25 51 16.9 58 40.0	-55	0.001 6163	5 6	18 55
17	736.5	13 39 53.126	312 + 8	26 49 56.9 58 27.8	-50	0.001 7342 1176	5 4	18 56
18	737.5	13 43 49.679	310 + 6	27 48 34.7 <sub>58 35.6</sub>	-42	0.001 8518	5 2	18 58
19	738.5	13 47 46.231	307 + 3	28 47 10.3 58 33.4	-31	0.001 9692	5 0	18 59
20	739.5	13 51 42.784	305 - 2	<sup>29</sup> 45 43.7 <sub>58</sub> <sub>31.4</sub>	-18	0.002 0864 1172	4 58	19 1
21	740.5	13 55 39-338	+302 - 6	30 44 15.1 58 29.3	- 4	0.002 2036	4 56	19 3
22	741.5	13 59 35.891	300 - 9	3I 42 44.4 58 27.4	+ 9	0.002 3207 1170	4 54	19 4
23	742.5	14 3 32.444	298 - 9	32 41 11.8 <sub>58 25.6</sub>	+23	0.002 4377 1168	4 52	19 6
24	743.5	14 7 28.997	296 - 7	33 39 37.4 58 23.9	+35	0.002 5545 1166	4 50	19 7
25 26	744.5	14 11 25.551	294 - 3	34 38 I.3 58 22.2	+44	0.002 6711 1164	4 48	19 9
26	745.5	14 15 22.104		35 30 23.5 <sub>58 20.6</sub>	+52	0.002 7875 1159	4 46	19 10
27	746.5	14 19 18.658	+290 + 8	36 34 44.1 58 19.0	+57	0.002 9034	4 44	19 12
28	747.5	14 23 15.211	289 +12	37 33 3.1 <sub>58 17.6</sub>	+59	0.003 0186	4 43	19 13
29	748.5	14 27 11.765	287 +14	50 15.9	+56	0.003 1330 1135	4 41	19 15
Mai 1	749.5	14 31 8.319		39 29 36.6 58 14.5	+51	0.003 2465 1124	4 39	19 16
	100	14 35 4.873		40 27 51.1 58 13.0	+44	0.003 3589 1112	4 37	19 18
2	1751.5	14 39 1.427	+283+7	41 26 4.1	+35	0.003 4701	4 35	19 19

- 73	50		Oh We	lt-Zeit		
Tag	Wochentag	Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer StZt.	Halb- messer
1940			b m s	mark of the	1	
Mai 2	Do	+3 1.09 6.76	2 36 0.34 n s	+15 15 56.3 17 52.1	66.08	15 53.85
3	Fr	3 7.85 6.19	2 30 50.13 3 49./9	15 33 48.4 17 36.7	66.16	15 53.60
4	Sa	2 14 04	2 43 40.40 3 50.30	15 51 25.1 17 20.9	66.24	15 53-37
5	St	3 19.68 5.64	2 47 31.41 3 50.92	16 8 46.0 17 4.9	66.32	15 53.13
6	Mo	2 24.75	2 51 22.00 3 51.49	16 25 50.9 16 48.6	66.40	15 52.90
7	Di	3 29.25 3.93	2 55 14.95 3 52.05	16 42 39.5 16 31.9	66.49	15 52.67
8	Mi	+2 22.18	2 50 7.57	+16 59 11.4 16 14.9	66.57	15 52.46
9	Do	2 26 55 3.3/	3 2 0.76	17 15 26.3 15 57.7	66.65	15 52.24
10	Fr	2 20 24	3 6 54.52 3 53.70	17 31 24.0 15 40.0	66.73	15 52.02
11	Sa	2 47 58 2.24	2 70 40 04 3 34.32	17 47 4.0 15 22.2	66.81	15 51.81
12	St	2 42.25	2 14 42 72 3 54.00	т8 2 26 2	66.89	15 51.60
13	Mo	3 44·37 <sub>0.56</sub>	3 18 39.16 3 55.44	18 17 30.1 14 45.4	66.98	15 51-39
14	Di	+3 44.93 0.01	3 22 35.15 3 56.54	+18 32 15.5 14 26.6	67.06	15 51.10
15	Mi	3 44.94 0.53	3 26 31.69	18 46 42.1 14 7.6	67.14	15 51.00
16	Do	3 44.41 1.08	3 30 28.78 3 57.63	19 0 49.7 13 48.3	67.22	15 50.80
17	Fr	3 43.33 1.62	3 34 26.41 3 58.18	19 14 38.0 13 28.7	67.30	15 50.61
18	Sa	3 41.71 2.16	3 38 24.59 3 58.71	19 28 6.7 13 8.8	67.38	15 50.42
19	St	3 39.55 2,69	3 42 23.30 3 59.26	19 41 15.5 12 48.7	67.46	15 50.23
20	Mo	+3 36.86	3 46 22.56 3 59.79	+19 54 4.2 12 28.3	67.54	15 50.06
21	Di	3 33.62	3 50 22.35 4 0.32	20 6 32.5 12 7.7	67.61	15 49.87
22	Mi	3 29.85	3 54 22.67 4 0.86	20 18 40.2 11 46.9	67.69	15 49.69
23	Do	3 25.55 4.82	3 58 23.53 4 1.38	20 30 27.1 11 25.8	67.76	15 49.51
24	Fr	3 20.73 5.35	4 2 24.91 4 1.90	20 41 52.9 11 4.5	67.83	15 49-34
25	Sa	3 15.38 5.86	4 6 26.81 4 2.42	20 52 57.4 10 43.0	67.90	15 49.16
26	St	+3 9.52 6.37	4 10 29.23 4 2.93	+21 3 40.4 10 21.2	67.97	15 48.99
27	Mo	3 3.15 6.86	4 14 32.16	21 14 1.6 9 59.2	68.04	15 48.82
28	Di	2 56.29 7.35	4 18 35.58 4 3.90	21 24 0.8 9 37.1	68.11	15 48.66
29	Mi	2 48.94 7.81	4 22 39.48	21 33 37.9 9 14.8	68.18	15 48.51
30	Do	2 41.13 8.27	4 26 43.85	21 42 52.7 8 52.1	68.24	15 48.35
31	Fr	2 32.86 8.71	4 30 48.67 4 5.26	21 51 44.8 8 29.4	68.30	15 48.19
Juni 1	Sa	+2 24.15 9.13	4 34 53.93 4 5.69	+22 0 14.2 8 6.5	68.36	15 48.04
2	St	2 15.02 9.53	4 38 59.62 4 6.09	22 8 20.7 7 43.2	68.41	15 47.90
3	Mo	2 5.49 9.91	4 43 5.71 4 6.47	22 16 3.9 7 19.9	68.46	15 47.76
4	Di	1 55.58 10.28	4 47 12.18 4 6.83	22 23 23.8 6 56.6	68.51	15 47.62
5	Mi	1 45.30 10.62	4 51 19.01 4 7.17	22 30 20.4 6 22.0	68.56	15 47.49
6	Do	1 34.68 10.93	4 55 26.18 4 7.49	22 36 53.4 6 9.1	68.61	15 47-37
7	Fr	+1 23.75	4 59 33.67 4 7.79	+22 43 2.5 5 45.2	68.66	15 47.25
8	Sa	1 12.52	5 3 41.46 4 8.05	22 48 47.7 5 21.2	68.70	15 47.14
9	St	I I.03	5 7 49.51 4 8.30	22 54 8.9 1 57.1	68.73	15 47.03
10	Mo	0 49.29 11.06	5 11 57.81 4 8.51	22 59 6.0 4 32.8	68.76	15 46.93
II	Di	0 37.33 12.15	5 10 0.32 1 8.71	23 3 38.8 4 8.5	68.79	15 46.83
12	Mi	+0 25.18	5 20 15.03	+23 7 47.3	68.82	15 46.73

			0 h	Welt-Zeit			Auf-	Unter-
Tag	Julian. Zeit	Sternzeit	Nutation in AR. langp. kurzp. Gl. Gl.	Mittleres Äquinok 1940.0 Länge	tium Breite	log R	gang in [+5	gang o° Breite o <sup>h</sup> Länge
1940	2429		in 0.001		in 0.01		h m	h m
Mai 2	751.5	14 39 1.427	+283 + 7	41 26 4.1 58 11.4	+35	0.003 4701	4 35	19 19
3	752.5	14 42 57.981	281 + 3	42 24 T5.5 -	+25	0.003 5801 1084	4 34	19 21
4	753.5	14 46 54.535	280 - 2	43 22 25.4 58 8.4	+13	0.003 6885 1069	4 32	19 22
5	754.5	14 50 51.089	279 - 6	44 20 33.8 58 6.8	- I	0.003 7954 1054	4 30	19 24
6	755-5	14 54 47.643	278 –10	45 18 40.6	-15	0.003 9008 1036	4 28	19 25
7	756.5	14 58 44.198	277 -12	46 16 45.9 58 3.6	-27	0.004 0044 1019	4 27	19 27
8	757-5	15 2 40.752	+276 -12	47 14 40.5	-39	0.004.1062	4 25	19 28
9	758.5	15 6 37.307	275 -10	18 12 51.4	-49	0.004.2064	4 24	19 30
10	759.5	15 10 33.862	275 - 6	40 10 51 7	-57	0.004.2046	4 22	19 31
11	760.5	15 14 30.416	274 - 2	50 8 50 2 3/ 30.0	-62	0.004 4011	4 20	19 33
12	761.5	15 18 26.971	273 + 3	51 6 47.1	-64	0.004 4958	4 19	19 34
13	762.5	15 22 23.526	273 + 6	52 4 42.I 57 53.2	-64	0.004 5889 931	4 17	19 36
14	763.5	15 26 20.081	+273 + 8	52 2 25.2	60	0.004.6802	4 16	19 37
15	764.5	15 30 16.636	273 + 7	54 0 26.7	-53	0.004.7702	4 14	19 39
16	765.5	15 34 13.192	272 + 4	E4 E8 T6 4 5/ 49·/	-43	0.004 7762 885	4 13	19 40
17	766.5	15 38 9.747	272 0	55 56 4·3 57 +6.2	-32	0.004 9459 861	4 12	19 41
18	767.5	15 42 6.302	272 - 5	56 52 50.5	-18	0.005 0320 851	4 10	19 43
19	768.5	15 46 2.858	272 - 9	57 51 35.0 57 +4.5 57 51 35.0	- 4	0.005 1171 841	4 9	19 44
20	769.5	15 49 59.413	+272 -10	58 40 18.0	+10	0.005 2012 832	4 8	19 45
21	770.5	15 53 55.969	273 - 9	59 46 59.5 57 40.2	+22	0.005 2844 823	4 7	19 46
22	771.5	15 57 52.524	273 - 5	60 44 39.7 57 38.8	+32	0.005 3667 814	4 6	19 48
23	772.5	16 1 49.080	273 0	61 42 18.5 57 37.7	+39	0.005 4481 804	4 4	19 49
24	773.5	16 5 45.636	274 + 5	62 39 56.2 57 36.6	+44	0.005 5285 792	4 3	19 51
25	774-5	16 9 42.192	274 +10	63 37 32.8 57 35.6	+46	0.005 6077 781	4 2	19 52
26	775.5	16 13 38.747	+275 +13	64 35 8.4	+45	0.005 6858 767	4 1	19 53
27	776.5	16 17 35.303	275 +13	65 32 43.T 3/ 34·/	+42	0.005 7625 752	4 0	19 54
28	777.5	16 21 31.860	276 +12	66 30 16.8 57 33.7 57 32.8	+36	0.005 8377 736	4 0	19 56
29	778.5	16 25 28.416	277 + 9	67 27 49.6 57 31.9	+27	0.005 9113 720	3 59	19 57
30	779-5	16 29 24.972	277 + 4	68 25 21.5 57 31.2	+17	0.005 9833	3 58	19 58
31	780.5	16 33 21.528	278 — I	69 22 52.7 57 30.3	+ 5	0.006 0534 681	3 57	19 59
Juni 1	781.5	16 37 18.084	+279 - 5	70 20 23.0 57 29.5	- 7	0.006 1215 661	3 56	20 0
2	782.5	16 41 14.641	280 - 9	71 17 52.5 57 28.7	-19	0.006 1876 640	3 56	20 I
3	783.5	16 45 11.197	281 -12	72 15 21.2 57 27.8	-32	0.006 2516 617	3 55	20 2
4	784.5	16 49 7.753	282 -12	73 12 49.0 57 27.1	-45	0.006 3133	3 54	20 3
5	785.5	16 53 4.310	283 –11	74 10 16.1 57 26.2	-55	0.006 3727	3 53	20 4
6	786.5	16 57 0.866	285 - 7	75 7 42.3 57 25.3	-64	0.006 4297 545	3 53	20 5
7	787-5	17 0 57.423	+286 - 3	76 5 7.6 57 24.4	-70	0.006 4842	3 52	20 5
8	788.5	17 4 53.980	287 + 2	77 2 32.0 57 23.4	-73	0.006 5363	3 52	20 6
9	789.5	17 8 50.536		77 59 55.4 57 22.5	-73	0.006 5860	3 51	20 7
10	790.5	17 12 47.093	290 + 9	78 57 17.9 57 21.4	-71	0.006 6333	3 51	20 8
11	791.5	17 16 43.649		79 54 39.3 57 20 5	-64	0.006 6782	3 51	20 8
12	792.5	17 20 40.206	+292 + 6	80 51 59.8	-55		3 50	20 9

	ag		Oh We	lt-Zeit		
Tag	Wochentag	Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer StZt.	Halb- messer
1940		m 8	h m s	0 1 "		
Juni 12	Mi	+0 25.18 12.32	5 20 15.03 m 8.88	+23 7 47.3 3 44.1	68.82	15 46.73
13	Do	0 12.86	5 24 23.91 4 9.03	23 11 31.4 3 19.5	68.85	15 46.64
14	Fr	+0 0.39 12.60	5 28 32.94 4 9.15	23 14 50.9 2 54.9	68.88	15 46.56
15	Sa	-0 I2.2I <sub>12.70</sub>	5 32 42.09 4 9.15	23 17 45.8 2 30.3	68.89	15 46.48
16	St	0 24.91 12.78	5 36 51.34 4 9.34	23 20 16.1 2 5.6	68.91	15 46.40
17	Mo	0 37.69 12.85	5 41 0.68 4 9.41	23 22 21.7 1 40.9	68.92	15 46.33
18	Di	0 50 54	5 45 10.00	+22 24 26	68.93	15 46.26
19	Mi	T 2.42	5 40 10.54 9.45	22 25 18 7	68.94	15 46.19
20	Do	1 16 25	5 53 20.01 + 9.47	51.4	68.94	15 46.13
21	Fr	T 20.28	5 57 28.40 4 9.40	22 26 26 4	68.94	15 46.07
22	Sa	1 12 10	6 I 47.07 + 9.48	22 26 28 1	68.94	15 46.01
23	St	1 55.08 <sub>12.83</sub>	6 5 57.41	23 26 14.9 0 47.9	68.93	15 45.96
24	Mo	-2 7.91 <sub>13.76</sub>	6 10 6.80	+33 35 35 0	68.92	15 45.91
25	Di	2 20 67	6 14 16.12 4 9.32	23 24 14.3	68.91	15 45.86
26	Mi	2 22 24	6 18 25.34 4 9.22	22 22 26 0	68.89	15 45.81
27	Do	2 45 80	6 00 04 45	22 20 24 8	68.87	15 45.77
28	Fr	2 58 21	6 26 42 42 4 8.97	22 T8 8 T	68.85	15 45.74
29	Sa	2 10 56	6 20 52 22	22 15 168 2 51.3	68.82	15 45.71
	St	12.0/	+ 0.03	3 15.7	68.80	
30 T1:	Mo	-3 22.63 <sub>11.86</sub>	4 8.41	+23 12 1.1 3 40.2		15 45.68
Juli 1	Di	3 34.49 11.63	6 39 9.27 4 8.19	23 8 20.9 4 4.4	68.76 68.72	15 45.66
2	Mi	3 46.12 11.37	6 43 17.46 4 7.93	23 4 16.5 4 28.7	68.68	15 45.64
3	Do	3 57.49 11.10	6 47 25.39 4 7.66 6 51 33.05	22 59 47.8 4 52.7	68.64	15 45.63
4	Fr	4 8.59 10.80	4 7.35	22 54 55.I 5 16.6	68.60	15 45.63
5	PI	4 19.39 10.47	6 55 40.40 4 7.03	22 49 38.5 5 40.5		15 45.63
6	Sa	-4 29.86 10.12	6 59 47.43 4 6.67	+22 43 58.0 6 4.1	68.56	15 45.63
7	St	4 39.98	7 3 54.10 4 6.30	22 37 53.9 6 27.6	68.50	15 45.64
8	Mo	4 49.72 9.34	7 8 0.40 4 5.90	22 31 26.3 6 51.0	68.45	15 45.66
9	Di	4 59.06 8.93	7 12 6.30 4 5.48	22 24 35.3 7 14.1	68.39	15 45.69
10	Mi	5 7.99 8.48	7 16 11.78 4 5.04	22 17 21.2 7 37.2	68.33	15 45.72
11	Do	5 16.47 8.03	7 20 16.82 4 4.58	22 9 44.0 7 59.9	68.27	15 45.75
12	Fr	-5 24.50 7 55	7 24 21.40	+22 1 44.1 8 22.6	68.21	15 45.79
13	Sa	5 32.05 7.55	7 28 25.51 4 3.62	21 53 21.5 8 45.1	68.15	15 45.83
14	St	7.00 T.T	7 22 20 12	21 44 36.4 9 7.3	68.09	15 45.88
15	Mo	5 39.11 6.56 5 45.67 6.04	7 36 32.25 4 3.12	21 35 29.1 9 29.3	68.02	15 45.93
16	Di	5 57 77	7 40 34.85 4 2.08	21 25 50 8 9 29.3	67.94	15 45.99
17	Mi	5 57.24 5.53	7 44 36.93 4 1.54	21 16 8.6 9 51.2	67.87	15 46.05
18	Do	-6 2.22	7 48 38.47	+27 5 55 7	67.80	15 46.11
19	Fr	6 6.60 4.40	7 52 30.48	20 44 27 4	67.72	15 46.18
20	Sa	6 70 60 3.91	7 56 20 05	20 11 26 2	67.64	15 46.24
21	St	6 T2 06 3.30	8 0 20 87 3 39.92	20 22 06	67.56	15 46.31
22	Mo	6 16 76	8 4 20 22 3 39.30	20 21 22.4	67.48	15 46.38
23	Di	-6 19.0I	8 8 38.03 3 58.80	+20 9 34.7	67.40	15 46.46

			Ор	Welt-Zeit	Auf-	Unter-
Tag	Julian. Zeit	Sternzeit	Nutation in AR. langp. kurzp. Gl. Gl.	Mittleres Äquinoktium 1940.0 log R Länge Breite	gang in $\{+50$	gang o° Breite o <sup>h</sup> Länge
1940	2429	h m s	in 0.001	in o.or	h m	h m
Juni 12	792.5	17 20 40.206	+292 + 6	80 51 59.8 57 19.4 -55 0.006 7210 408	3 50	20 9
13	793.5	17 24 36.763	294 + 2	81 49 19.2 57 18.4 -44 0.006 7618 387	3 50	20 9
14	794.5	17 28 33.320	295 - 3	82 46 37.6 57 17 5 32 0.006 8005 360	3 50	20 10
15	795.5	17 32 29.877	296 - 7	83 43 55.1 57 16 6 -19 0.006 8374 352	3 50	20 10
16	796.5	17 36 26.433	<b>298</b> – 9	84 41 11.7 57 15.8 - 7 0.000 8726	3 50	20 11
17	797.5	17 40 22.990	299 - 9	$85\ 38\ 27.5\ \frac{37}{57}\ \frac{15.1}{15.1} + 6 \ 0.006\ 9063\ \frac{337}{323}$	3 50	20 II
18	798.5	17 44 19-547	+301 - 7	86 35 42.6 +17 0.006 9386	3 50	20 12
19	799.5	17 48 16.104	302 - 3	87 22 57 0 3/ 1+14 +26 0 006 0604	3 50	20 12
20	800.5	17 52 12.661	304 + 3	88 20 10.8 5/ 13.0 +21 0.006 0087	3 50	20 12
21	801.5	17 56 9.217	305 + 7	89 27 24.1 57 13.1 +34 0.007 0.267 266	3 50	20 12
22	802.5	18 0 5.774	307 +11	90 24 37.2 57 12.7 +34 0.007 0533 252	3 51	20 13
23	803.5	18 4 2.331	308 +13	91 21 49.9 57 12.6 +31 0.007 0785 236	3 51	20 13
24	804.5	18 7 58.888	+310 +12	92 19 2.5 57 12.4 +26 0.007 1021 218	3 51	20 13
25	805.5	18 11 55.445	311 +10	93 16 14.9 57 12.4 +17 0.007 1239 201	3 51	20 13
26	806.5	18 15 52.002	313 + 6	94 13 27.3 57 12.3 + 6 0.007 1440 183	3 52	20 13
27	807.5	18 19 48.559	314 + 1	95 10 39.6 57 12.4 - 5 0.007 1623 163	3 52	20 13
28	808.5	18 23 45.115	316 - 4	96 7 52.0 57 12.4 -17 0.007 1786 142	3 53	20 13
29	809.5	18 27 41.672	317 - 8	97 5 4.4 57 12.5 -29 0.007 1928 120	3 53	20 13
30	810.5	18 31 38.229	+318 -12	98 2 16.9 57 12.6 -42 0.007 2048 98	3 54	20 13
Juli 1	811.5	18 35 34.786	320 -13	98 59 29.5 57 1, 7 -54 0.007 2146	3 55	20 12
2	812.5	18 39 31.342	321 -12	99 56 42.2 57 12.9 -64 0.007 2220 49	3 55	20 12
3	813.5	18 43 27.899	322 - 9	100 53 55.1 57 13.0 -72 0.007 2269 24	3 56	20 11
4	814.5	18 47 24.456	324 - 4	101 51 8.1 57 13.0 -78 0.007 2293	3 57	20 11
5	815.5	18 51 21.012	325 + 1	102 48 21.1 57 13.1 -82 0.007 2291 29	3 58	20 11
6	816.5	18 55 17.569	+326 + 5	103 45 34.2 57 13.2 -81 0.007 2262 56	3 59	20 10
7	817.5	18 59 14.125	327 + 9	104 42 47.4 57 13.1 -78 0.007 2206 82	3 59	20 10
8	818.5	19 3 10.682	328 +10	105 40 0.5 57 13.1 -72 0.007 2124 109	4 0	20 9
9	819.5	19 7 7.238	329 ÷ 8	106 37 13.6 57 13.0 -63 0.007 2015 133	4 1	20 9
10	820.5	19 11 3.795	330 + 4	107 34 26.6 57 12.0 -53 0.007 1882	4 2	20 8
11	821.5	19 15 0.351	331 - 1	108 31 39.5 57 12.9 -41 0.007 1725 179	4 3	20 7
12	822.5	19 18 56.907	+332 - 5	109 28 52.4 57 12.8 -27 0.007 1546 200	4 4	20 7
13	823.5	19 22 53.463	333 - 8	110 26 5.2 57 12.7 -13 0.007 1346 219	4 5	20 6
14		19 26 50.020	334 - 9	111 23 17.9 57 12.8 0 0.007 1127 237	4 6	20 5
15		19 30 46.576		112 20 30.7 57 13.0 +11   0.007 0890 254	4 7	20 4
16	0	19 34 43.132		113 17 43.7 57 13.1 +20   0.007 0030 271	4 8	20 3
17	827.5	19 38 39.688		114 14 56.8 57 13.3 +26 0.007 0365 284	4 9	20 2
18		19 42 36.244		115 12 10.1 +29 0.007 0081 298	4 10	20 I
19	1			110 9 23.8 57 14.2 +30   0.000 9783 313	4 11	20 0
20				117 0 38.0 57 14.8 -27 0.000 9470 327	4 12	19 59
21	831.5		00	118 3 52.8 57 15.3 +22 0.000 9143 341	4 14	19 58
22	832.5			119 1 8.1 57 16.1 +14 0.006 8802 357 119 58 24.2 + 5 0.006 8445	4 15	19 56
23	833.5	20 2 19.023	1+339 + 7	119 58 24.2 1   + 5   0.006 8445	4 17	19 55

	ag		0 <sup>h</sup> We	lt-Zeit		
Tag	Wochentag	Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer StZt.	Halb- messer
1940		m a	h m s	0 / "		, .
Juli 23	Di	-6 19.01 1.68	8 8 38.03 m 3 58.24	+20 9 34.7 12 17.9	67.40	15 46.40
24	Mi	6 20.69	8 12 36.27	19 57 16.8 12 37.9	67.32	15 46.54
25	Do	6 21.81	8 16 33.94 3 57.10	19 44 38.9 12 57.7	67.24	15 46.6
26	Fr	6 22.35	8 20 31.04 3 56 52	19 31 41.2	67.16	15 46.72
27	Sa	6 22.31 0.61	8 24 27.56	19 18 24.0 13 36.4	67.07	15 46.8
28	St	6 21.70	8 28 23.50 3 55.36	19 4 47.6 13 55.3	66.99	15 46.91
29	Mo	6	8 32 18.86	-18 50 52.2	66.90	15 47.01
30	Di	6 18 72	8 26 T2 62 5 5+·//	18 26 28 2	66.81	15 47.13
31	Mi	6 16 25 2.3/	8 40 7 82 3 34.19	18 22 60 7 32.3	66.73	15 47.2
Aug. I	Do	6 12.20	8 41 1.41 3 55.59	18 7 15.5 15 82	66.64	15 47-3
2	Fr	6 0.84	8 47 54 41 3 55.00	TE 52 5 2	66.55	15 47.43
3	Sa	6 5.69 +.15	8 51 46.82 3 52.41 8 51 46.82	17 36 41.4 15 43.0	66.47	15 47.58
4	St	-6 0.04	8 == 28 62	-17 20 58 4	66.38	15 47.71
5	Mo	5 55.58 5.36	8 50 20.82	17 4 58.6 16 16.4	66.29	15 47.8
6	Di	= 40.62	0 2 20 12	16 48 42.2 16 32.6	66.21	15 47.90
7	Mi	5 42 06	9 7 10.41 3 49.99	16 32 9.6 16 48.6	66.12	15 48.1.
8	Do	5 25.80	0 10 50 50	16 15 21 0	66.03	15 48.20
9	Fr	5 28.12 8.38	9 14 48.57 3 48.78	15 58 16.8 17 4.2	65.95	15 48.43
10	Sa	-5 19.74 <sub>8.97</sub>	9 18 36.75	+15 40 57.3 17 34.5	65.86	15 48.6
11	St	5 10.77 9.55	9 22 24.34 3 46.99	15 23 22.8 17 49.3	65.78	15 48.7
12	Mo	5 1.22 10.14	9 26 11.33 3 46.42	15 5 33.5 18 3.6	65.70	15 48.9
13	Di	4 51.08 10.71	9 29 57.75 3 45.85	14 47 29.9 18 17.7	65.62	15 49.10
14	Mi	4 40.37 11.26	9 33 43.60 3 15.20	14 29 12.2 18 31.5	65.54	15 49.2
15	Do	4 29.11 11.81	9 37 28.89 3 44.74	14 10 40.7 18 45.1	65.46	15 49.4
16	Fr	-4 17.30 <sub>12.34</sub>	9 41 13.63 3 44.22	+13 51 55.6 18 58.2	65.38	15 49.6
17	Sa	4 4.96 12.86	9 44 57.85 3 43.69	13 32 57.4 19 11,1	65.31	15 49.8
18	St	3 52.10 13.36	9 48 41.54 3 43.20	13 13 46.3 19 23.8	65.23	15 50.0
19	Mo	3 38.74 13.84	9 52 24.74 2 12 70	12 54 22.5 19 36.0	65.16	15 50.1
20	Di	3 24.90 14.32	9 56 7.44 3 42.23	12 34 46.5 10 18.1	65.09	15 50.3
21	Mi	3 10.58 14.78	9 59 49.67 3 41.78	12 14 58.4 19 59.7	65.02	15 50.5
22	Do	-2 55.80 <sub>15.22</sub>	10 3 31.45 3 41.33	+11 54 58.7 20 11.1	64.95	15 50.7
23	Fr	2 40.58 15.65	10 7 12.78 3 40.91	II 34 47.6 20 22.2	64.89	15 50.9
24	Sa	2 24.93 16.06	10 10 53.69 3 40.49	11 14 25.4 20 22.0	64.82	15 51.1
25	St	2 8.87 16.46	1 10 14 34.18	10 53 52.5 20 43.4	64.76	15 51.3
26	Mo	1 52.41 16.81	10 18 14.27	10 33 9.1	64.70	15 51.5
27	Di	1 35.57 17.21	10 21 53.99 3 39.34	10 12 15.6 20 53.5	64.64	15 51.7
28	Mi	-1 18.36	10 25 33.33	+ 9 51 12.3 21 12.8	64.59	15 51.9
29	Do	1 0.81 17.80	10 29 12.33	9 29 59.5 21 21.0	64.53	15 52.1
30	Fr	0 42.92 18 22	10 32 30.99	9 8 37.0 21 20.8	64.48	15 52.4
31	Sa	0 24.70 18 52	10 30 29.33 2 28.02	8 47 6.8 21 20 2	64.43	15 52.6
Sept. 1	St	-o 6.18 <sub>18.83</sub>	10 40 1.30 3 37.73	8 25 27.6 21 17.1	64.38	15 52.8
2	Mo	+0 12.65	10 43 45.09 3 37.73	+ 8 3 40.2	64.34	15 53.0

			Оъ	Welt-Zeit			Auf-	Unter-
Tag	Julian. Zeit	Sternzeit	Nutation in AR. langp. kurzp. Gl. Gl.	Mittleres Äquinok 1940.0 Länge	tium Breite	$\log R$	gang in (+5	gang o° Breite o <sup>h</sup> Länge
1940	2429	h m	in 0.001		in 0.01		b m	h m
Juli 23	833.5	20 2 19.023	+339 + 7	119 58 24.2 57 16.8	+ 5	0.006 8445	4 17	19 55
24	834.5	20 6 15.578	339 + 2	120 55 41.0	- 6	0.006 8073 372	4 18	19 54
25	835.5	20 10 12.134	339 - 3	121 52 58.7 57 18.6	-18	0.006 7685	4 19	19 53
26	836.5	20 14 8.689	339 - 7	122 50 17.3 57 19.5	-30	0.006 7280	4 21	19 52
27	837.5	20 18 5.244	339 -11	122 47 26.8 3/ 19.5	-42	0.006 6856	4 22	19 50
28	838.5	20 22 1.800	339 -13	124 44 57·3 57 21.6	-53	0.006 6415 462	4 24	19 49
29	839.5	20 25 58.355	+339 -13	125 42 18.9	-63	0.006 5953	4 25	19 48
30	840.5	20 29 54.910	338 -11	126 20 11 5	-71	0.006 5471	4 26	19 46
31	841.5	20 33 51.465	338 - 7	127 37 5.1	-77	0.006.4068	4 27	19 45
Aug. 1	842.5	20 37 48.020	338 - 2	708 21 20 8 5/ 24./	-8o	0.006 4442	4 29	19 43
2	843.5	20 41 44.574	337 + 3	129 31 55.6 57 25.8 129 31 55.6 57 26.8	-8o	0.006 2804	4 30	19 42
3	844.5	20 45 41.129	336 + 7	130 29 22.4 57 27.8	-76	0.006 3321 573	4 31	19 40
4	845.5	20 49 37.684	+336 + 9	131 26 50.2 57 28.8	-71	0.006 2723 624	4 32	19 38
5	846.5	20 53 34.238	335 + 9	132 24 19.0 57 29.7	-62	0.006 2099 647	4 34	19 37
6	847.5	20 57 30.793	334 + 6	133 21 48.7 57 30.5	-51	0.006 1452 670	4 35	19 35
7	848.5	2I I 27.347	333 + 2	134 19 19.2 57 31.4	-38	0.006 0782 693	4 37	19 34
8	849.5	21 5 23.902	$33^2 - 3$	135 16 50.6 57 32.2	-24	0.006 0089	4 38	19 32
9	850.5	21 9 20.456	331 - 7	136 14 22.8 57 33.0	-10	0.005 9375 733	4 40	19 30
10	851.5	21 13 17.010	+330 - 8	137 11 55.8 57 33.8	+ 4	0.005 8642	4 41	19 28
II	852.5	21 17 13.564	328 - 7	138 9 29.6 57 34.7	+16	0.005 7891 768	4 43	19 27
12	853.5	21 21 10.118	327 - 4	139 7 4.3 57 35.6	+25	0.005 7123 781	4 44	19 25
13	854.5	21 25 6.672	325 0	140 4 39.9 57 36.5	+33	0.005 6342 795	4 46	19 23
14	855.5	21 29 3.225	324 + 5	141 2 16.4 57 37.6	+37	0.005 5547 808	4 47	19 21
15	856.5	21 32 59.779	322 + 9	141 59 54.0 57 38.7	+38	0.005 4739 818	4 49	19 19
16	857.5	21 36 56.333	+321 +12	142 57 32.7 57 39.9	+36	0.005 3921 829	4 50	19 17
17	858.5	21 40 52.887	319 +12	143 55 12.6 57 41.1	+31	0.005 3092 839	4 52	19 15
18	859.5	21 44 49.440	317 +11	144 52 53.7 57 42.5	+23	0.005 2253 840	4 53	19 13
19	860.5	21 48 45.994	315 + 8	145 50 36.2 57 44.0	+14	0.005 1404 860	4 55	19 11
20	861.5	21 52 42.547	313 + 4	146 48 20.2	+ 4	0.005 0544 868	4 56	19 9
21	862.5	21 56 39.100	311 - 1	147 46 5.6 57 47.0	- 7	o.co4 9676 879	4 58	19 8
22	863-5	22 0 35.653	+308 - 5	148 43 52.6 57 48.6	-19	o.co4 8797 890	4 59	19 6
23	864.5	22 4 32.206	306 - 9	149 41 41.2 57 50.3	-31	0.004 7907 901	5 1	19 4
24	865.5	22 8 28.759	304 -12	150 39 31.5 57 52.1	-42	0.004 7006 913	5 2	19 2
25	866.5		301 -13	151 37 23.6 57 53.8	-53	0.004 0093 026	- A	19 0
26	867.5	22 16 21.865	299 -12	152 35 17.4 57 55.6	-60	0.004 5167 028		18 57
27	868.5	22 20 18.418	296 - 9	153 33 13.0 57 57.4	-66	0.004 4229 952	5 7	18 55
28	869.5	22 24 14.971		154 31 10.4 57 59.3	-69	0.004 3277 068	5 8	18 53
29	870.5	22 28 11.523		155 29 9.7 58 1.1	-70	0.004 2309 984	5 10	18 51
30	871.5	22 32 8.076		156 27 10.8 58 3.0	-67	0.004 1325 1001	5 11	18 49
31	872.5	22 36 4.628		157 25 13.8 58 4.7	-6 <b>1</b>	0.004 0324 1019	5 13	18 47
Sept. 1				158 23 18.5 58 6.6	-52	0.003 9305 1036	5 14	18 45
2	874.5	22 43 57.733	+279+6	159 21 25.1	-41		5 16	18 43

	80		0 <sup>h</sup> We	lt-Zeit		
Tag	Wochenta	Zeitgleichung Wahre Zeit <i>minus</i> Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer StZt.	Halb- messer
1940						11111
Sept. 2	Mo	+ 0 12.65	10 43 45.09 m	+8 3 40.2 37 55 2	64.34	15 53.06
3	Di	0 31.75 19.38	10 47 22.53	7 41 45.0 22 2.6	64.30	15 53.29
4	Mi	0 51.13 19.64	10 50 59.70 3 36.91	7 19 42.4 22 9.7	64.26	15 53-53
5	Do	I 10.77 19.89	10 54 36.61 3 36.67	6 57 32.7 22 16.4	64.22	15 53-77
6	Fr	1 30.66	10 58 13.28 3 36.43	6 35 16.3	64.19	15 54.01
7	Sa	1 50.78 20.34	11 1 49.71 3 36.21	6 12 53.4 22 29.0	64.16	15 54.26
8	St	+ 2 11.12	II 5 25.92 <sub>3 36.02</sub>	+5 50 24.4 22 34.7	64.13	15 54.51
9	Mo	2 31.66 20.71	11 9 1.94 3 35.84	5 27 49.7 22 40.2	64.11	15 54.76
10	Di	2 52.37 20.88	11 12 37.78 2 25.67	5 5 9.5 22 45.2	64.08	15 55.01
11	Mi	3 13.25 21,01	11 16 13.45 3 35.54	4 42 24.3 22 50,1	64.06	15 55.27
12	Do	3 34.26 21.13	11 19 48.99 3 35.42	4 19 34.2 22 54.5	64.05	15 55.53
13	Fr	3 55.39 21.23	11 23 24.41 3 35.33	3 56 39.7 22 58.7	64.04	15 55.78
14	Sa	+ 4 16.62 21.30	11 26 59.74 3 35.25	+3 33 41.0 23 2.5	64.03	15 56.04
15	St	4 37.92 21.35	11 30 34.99 3 35.20	3 10 38.5 23 6.1	64.02	15 56.30
16	Mo	4 59.27 21.37	11 34 10.19 3 35.18	2 47 32.4 22 0.3	64.01	15 56.56
17	Di	5 20.64 21.38	11 37 45.37 3 35.18	2 24 23.1 23 12.2	64.01	15 56.82
18	Mi	5 42.02 21,36	11 41 20.55 3 35.19.	2 1 10.9 23 14.7	64,01	15 57.08
19	Do	6 3.38 21.31	II 44 55.74 <sub>3 35.24</sub>	1 37 56.2 23 17.0	64.01	15 57-34
20	Fr	+ 6 24.69 21.25	11 48 30.98 3 35.30	+1 14 39.2 23 18.9	64.01	15 57.61
21	Sa	6 45.94 21.16	11 52 6.28 3 35.39	0 51 20.3 23 20.5	64.02	15 57.87
22	St	7 7.10 21.05	11 55 41.67 3 35.51	0 27 59.8 23 21.8	64.04	15 58.13
23	Mo	7 28.15 20.91	11 59 17.18 3 35.63	+0 4 38.0 23 22.7	64.06	15 58.40
24	Di	7 49.06 20.76	12 2 52.81 3 35.79	-0 18 44.7 23 23.3	64.08	15 58.66
25	Mi	8 9.82 20.59	12 6 28.60 3 35.97	0 42 8.0 23 23.6	64.10	15 58.93
26	Do	+ 8 30.41 20.38	12 10 4.57 3 36.17	$-1$ 5 31.6 $_{23}$ $_{23.5}$	64.12	15 59.19
27	Fr	8 50.79 20.17	12 13 40.74 3 36.38	1 28 55.1 23 23.0	64.15	15 59.46
28	Sa	9 10.96	12 17 17.12 3 36.62	I 52 18.1 23 22.3	64.18	15 59.73
29	St	9 30.90 19.68	12 20 53.74 3 36.87	2 15 40.4 23 21.0	64.21	16 0.00
Ol++ 7	Mo Di	9 50.58 19.41	12 24 30.61 3 37.14	2 39 1.4 23 19.6	64.25	16 0.27
Okt. I		10 9.99 19.13	12 28 7.75 3 37.42	3 2 21.0 23 17.7	64.29	16 0.54
2	Mi	+10 29.12 18.82	12 31 45.17 3 37.73	$-3 \ 25 \ 38.7 \ _{23 \ 15.3}$	64.34	16 0.82
3	Do	10 47.94 18.52	12 35 22.90 3 38.03	3 48 54.0 23 12.7	64.38	16 1.10
4	Fr	11 0.40 18.18	12 39 0.93 3 38.37	4 12 6.7 23 9.6	64.43	16 1.38
5	Sa	11 24.64 17.84	12 42 39.30 3 38.72	4 35 16.3 23 6.2	64.48	16 1.66
6	St	11 42.48 17.47	12 46 18.02 3 39.08	4 58 22.5 22 2.4	64.54	16 1.94
7	Mo	11 59.95 17.09	12 49 57.10 3 39.46	5 21 24.9 22 58.3	64.60	16 2.22
8	Di	+12 17.04 16.69	12 53 36.56 3 39.86	-5 44 23.2 <sub>22 53.7</sub>	64.66	16 2.51
9	Mi	12 33.73 16.26	12 57 10.42	0 7 10.9 22 48.8	64.72	16 2.79
10	Do E-	12 49.99 15.83	13 0 56.71 3 40.73	0 30 5.7 22 42.6	64.78	16 3.08
II	Fr	13 5.82 15.36	13 4 37.44 3 41.19	6 52 49.3 22 37.9	64.85	16 3.36
12	Sa St	13 21.18 14.87	13 8 18.63 3 41.68	7 15 27.2 22 32.0	64.93	16 3.64
13	100	+13 36.05	13 12 0.31	<u>−7 37 59.2</u>	65.00	16 3.92

			0 h	Welt-Zeit			Auf-	Unter-
Tag	Julian. Zeit	Sternzeit	Nutation in AR. langp. kurzp Gl. Gl.	Mittleres Äquinok 1940.0 Länge	tium Breite	log R	gang in {+50	gang Breite Länge
1940	2429		in o.cor		in o.or		h m	h m
Sept. 2	874.5	22 43 57·733	+279 + 6	159 21 25.1 58 8.2	-41	0.003 8269 1055	5 16 m	18 43 m
3	875.5	22 47 54.285	276 + 3	160 19 33.3 58 9.9	-28	0.003 7214 1074	5 17	18 41
4	876.5	22 51 50.838	273 - 2	161 17 43.2 58 11.4	-13	0.003 6140 1091	5 19	18 39
.5	877.5	22 55 47.390	270 - 6	162 15 54.6 58 13.0	+ 2	0.003 5049 1106	5 20	18 36
6	878.5	22 59 43.942	267 - 8	163 14 7.6 58 14.4	17	0.003 3943 1120	5 22	18 34
7	879.5	23 3 40.494	264 - 8	164 12 22.0 58 16.0	-1-30	0.003 2823 1134	5 23	18 32
8	880.5	23 7 37.046	+260 - 5	165 10 38.0 58 17.4	-1-41	0.003 1689 1144	5 25	18 30
9	881.5	23 11 33.598	257 0	166 8 55.4 58 18.9	+49	0.003 0545 1154	5 26	18 28
10	882.5	23 15 30.150	253 + 5	167 7 14.3 58 20.5	+54	0.002 9391	5 28	18 25
II	883.5	23 19 26.702	250 + 9	168 5 34.8 58 22 0	+56	0.002 8230 1168	5 29	18 23
12	884.5	23 23 23.254	247 +12	169 3 56.8 58 23.7	+55	0.002 7062	5 31	18 21
13	885.5	23 27 19.806	243 +13	170 2 20.5 58 25.4	+51	0.002 5890 1176	5 32	18 19
14	886.5	23 31 16.358	+240 +12	171 0 45.9 58 27.1	+44	0.002 4714 1179	5 34	18 17
15	887.5	23 35 12.909	236 + 9	171 59 13.0 58 29.0	+36	0.002 3535 1182	5 35	18 14
16	888.5	23 39 9.461	232 + 5	172 57 42.0 58 30.8	+25	0.002 2353 1183	5 37	18 12
17	889.5	23 43 6.013	229 + 1	173 56 12.8 58 32.8	+13	0.002 1170 1185	5 38	18 10
18	890.5	23 47 2.565	225 - 4	174 54 45.0 58 34.8	+ 1	0.001 9985 1186	5 40	18 8
19	891.5	23 50 59.116	222 - 8	175 53 20.4 58 36.8	-11	0.001 8799 1188	5 41	18 6
20	892.5	23 54 55.668	+218 -11	176 51 57.2 58 38.9	-23	0.001 7611 1189	5 43	18 3
21	893.5	23 58 52.220	214 -12	177 50 36.1 58 41.1	-33	0.001 6422	5 44	18 I
22	894.5	0 2 48.771	210 -12	178 49 17.2 58 43.3	-42	0.001 5231	5 46	17 59
23	895.5	0 6 45.323	207 -10	179 48 0.5 58 45.5	-49	0.001 4037 1196	5 47	17 57
24	896.5	0 10 41.875	203 - 6	180 46 46.0 58 47.8	-53	0.001 2841 1199	5 49	17 55
25	897.5	0 14 38.427	199 – 2	181 45 33.8 <sub>58 50.1</sub>	-54	0.001 1642	5 50	17 52
26	898.5	0 18 34.978	+196 + 3	182 44 23.9 58 52.3	-52	0.001 0438	5 52	17 50
27	899.5	0 22 31.530	192 + 6	183 43 16.2 58 54.7	-48	0.000 9229 1216	5 53	17 48
28	900.5	0 26 28.082	188 + 8	184 42 10.9 58 56.9	-39	0.000 8013	5 55	17 46
29	901.5	0 30 24.633	185 + 6	185 41 7.8 58 50.2	-28	0.000 6790 1231	5 56	17 44
30	902.5	0 34 21.185	181 + 3	186 40 7.0 50 1.3	-15	0.000 5559 1240	5 58	17 41
Okt. 1	903.5	0 38 17.737	178 – 1	187 39 8.3 59 3.3	- I	0.000 4319 1248	5 59	17 39
2	904.5	0 42 14.289	+174 - 6	188 38 11.6 59 5.4	+13	0.000 3071 1257	6 I	17 37
3	905.5	0 46 10.840	170 - 9	189 37 17.0 59 7.3	+28	0.000 1814 1265	6 3	17 35
4	906.5	0 50 7.392	167 - 9	190 36 24.3	+42	0.000 0549 1271	6 4	17 33
5	907.5	0 54 3.944	163 - 7	191 35 33.5 50 10.0	+54	9.999 9278	6 6	17 30
6	908.5	0 58 0.496	160 - 2	192 34 44.4 59 12.8	+64	9.999 8002 1280	6 7	17 28
7	909.5	1 1 57.048	157 + 3	193 33 57-2 59 14.5	+71	9.999 6722 1281	6 9	17 26
8	910.5	1 5 53.600	+153 + 8		+74	9.999 5441 1280	6 11	17 24
9	911.5	1 9 50.152	150 +12	195 32 27.9 50 18.0	+74	9.999 4161 1278	6 12	17 22
10	912.5	1 13 46.704	147 +14	196 31 45.9 59 19.8	+71	9.999 2883 1275	6 14	17 20
II	913.5	1 17 43.256	143 +14	197 31 5.7 50 21.7	+65	9.999 1608 1270	6 15	17 18
12	914.5	1 21 39.808		198 30 27.4 59 23.4	+57	9.999 0338 1263	6 17	17 16
13	915.5	1 25 36.361	+137+7	199 29 50.8	+47	9.998 9075	6 18	17 14

	50		0 h W 6	elt-Zeit		
Tag	Wochentag	Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer StZt.	Halb- messer
1940		m ·	h m s	0 , "	1,100	3 1
Okt. 13	St	+13 36.05 14.37	13 12 0.31 m 3 42.19	- 7 37 59.2 22 25.6	65.00	16 3.92
14	Mo	13 50.42	13 15 42.50 3 42.71	8 0 24.8 22 18.9	65.08	16 4.20
15	Di	14 4.26	13 19 25.21 3 42.71	8 22 43.7 22 11.8	65.16	16 4.48
16	Mi	14 17.55 12.72	13 23 8.47	8 44 55.5 22 4.4	65.24	16 4.75
17	Do	14 30.27 12.13	13 20 52.30	9 6 59.9 21 56.6	65.33	16 5.03
18	Fr	14 42.40 11.53	13 30 36.72 3 45.03	9 28 56.5 21 48.4	65.41	16 5.30
19	Sa	+14 53.93 10.89	T2 24 21 77	- 9 50 44.9 <sub>21 39.8</sub>	65.50	16 5.57
20	St	15 4.82	13 38 7.41 3 45.66 13 38 7.41 3 46.31	10 12 24.7 21 30.8	65.60	16 5.84
21	Mo	15 15.06 9.58	13 41 53.72 3 46.98	10 33 55.5 21 21.5	65.69	16 6.10
22	Di	15 24.64 8.88	13 45 40.70 3 47.66	10 55 17.0 21 11.8	65.79	16 6.36
23	Mi	15 33.52 8.19	13 49 28.36 3 48.37	11 16 28.8 21 1.7	65.89	16 6.63
24	Do	15 41.71 7.47	13 53 16.73 3 49.08	11 37 30.5 20 51.2	65.99	16 6.89
25	Fr	±15 40 18	T2 57 5.8T	—11 58 21.7 <sub>20 40.3</sub>	66.09	16 7.14
26	Sa	15 55.92 6.74 5 55.92 5.99	14 0 55.63 3 49.82	12 19 2.0 20 29.0	66.19	16 7.40
_ 27	St	16 1.91 5.23	14 4 46.20 3 51.32	12 39 31.0 20 17.3	66.30	16 7.66
28	Mo	16 7.14 4.46	14 8 37.52 3 52.08	12 59 48.3 20 5.2	66.40	16 7.91
29	Di	16 11.60 3.60	14 12 29.60	13 19 53.5 19 52.6	66.51	16 8.17
30	Mi	16 15.29 2.91	14 16 22.47 3 53.64	13 39 46.1 19 39.7	66.62	16 8.43
31	$D_0$	+16 18.20	14 20 16.11 3 54.43	-13 59 25.8 <sub>10 26 2</sub>	66.74	16 8.68
Nov. 1	Fr	16 20.33	14 24 10.54 3 55.21	14 18 52.1 10 12.5	66.85	16 8.93
2	Sa	16 21.67 0.54	14 28 5.75 3 56.02	14 38 4.6 18 58.2	66.96	16 9.19
3	St	16 22.21 0.26	14 32 1.77 2 56 81	14 57 2.8 18 43.6	67.08	16 9.44
4	Mo	16 21.95	14 35 58.58 2 57 67	15 15 46.4 18 28.5	67.20	16 9.69
5	Di	16 20.89 1.86	14 39 56.19 3 58.42	15 34 14.9 18 13.0	67.31	16 9.94
6	Mi	+16 19.03 2.68	14 43 54.61 3 59.23	-15 52 27.9 <sub>17 57.1</sub>	67.43	16 10.18
7	Do	16 16.35	14 47 53.84 4 0.06	16 10 25.0 17 40.9	67.55	16 10.43
8	Fr	16 12.85	14 51 53.90 4 0.87	16 28 5.9 17 24.1	67.67	16 10.67
9	Sa	16 8.53	14 55 54.77 4 1.71	16 45 30.0 17 7.1	67.79	16 10.91
10	St	16 3.38 5.99	14 59 56.48 4 2.54	17 2 37.1 16 49.5	67.91	16 11.15
11	Мо	15 57.39 6.82	15 3 59.02 4 3.37	17 19 26.6 16 31.7	68.03	16 11.53
12	Di	+15 50.57 7.66	15 8 2.39 4 4.22	-17 35 58.3 <sub>16 13.4</sub>	68.15	16 11.61
13	Mi	15 42.91 8.50	15 12 6.61	17 52 11.7 15 54.8	68.27	16 11.84
14	Do	15 34.41 9.34	15 16 11.66	18 8 6.5 15 25.6	68.39	16 12.06
15	Fr	15 25.07 10.10	15 20 17.50 4 6.75	18 23 42.1	68.51	16 12.28
16	Sa	15 14.88 11.03	15 24 24.31	10 30 58.4	68.62	16 12.49
17	St	15 3.85 11.88	15 28 31.90 4 8.43	10 53 54.9 14 36.2	68.74	16 12.69
18	Mo	+14 51.97 12.72	15 32 40.33 4 9.27	-19 8 3I.I	68.85	16 12.90
19	Di	14 39.25	15 36 49.60	19 22 46.9	68.97	16 13.10
20	Mi	14 25.70	15 40 59.71 4 10.94	19 30 41./ 12 22.5	69.08	16 13.30
21	Do	14 11.31	15 45 10.65	19 50 15.2 13 11.8	69.19	16 13.49
22	Fr	13 56.10 16.03	15 49 22.42 4 12.59	20 3 27.0 12 49.9	69.30	16 13.67
23	Sa	+13 40.07	15 53 35.01	-20 16 16.9	69.41	16 13.85

			O <sup>h</sup>	Welt-Zeit			Auf-	Unter-
Tag	Julian.	Sternzeit	Nutation in AR.	Mittleres Äquinok	tium	$\log R$	gang	gang o Breite
	Zeit		langp. kurzp.	Länge	Breite	100	in	oh Länge
1940	2429		8		,			]
Okt. 13	915.5	1 25 36.361	in o.ooi +137 + 7	199 29 50.8 50 254	in o.o1 +47	9.998 9075	6 18 m	17 14
14	916.5	1 29 32.913	134 + 3	200 20 16 2	+36	0.008 7817	6 20	17 12
15	917.5	1 33 29.465	131 - 2	201 28 42 5 59 27.3	+24	0.008 6568 1249	6 21	17 10
16	918.5	1 37 26.018	128 - 6	202 28 T2.8 39 29.3	+11	0.008 5227	6 23	17 8
17	919.5	1 41 22.570	125 - 9	203 27 44.1	- I	9.998 4095	6 24	17 6
18	920.5	1 45 19.123	123 -11	204 27 17.4 59 33.3	-12	9.998 2872	6 26	17 4
10			122 11	59 35-4	12	1213	0 20	
19	921.5	1 49 15.676	+120 -12	205 26 52.8 59 37.6	-21	9.998 1659 1203	6 28	17 2
20	922.5	1 53 12.228	117 -10	206 26 30.4 59 39.8	-29	9.998 0456	6 29	17 0
21	923.5	1 57 8.781	115 - 7	207 26 10.2	-34	9.997 9263	6 31	16 58
22	924.5	2 I 5.334	112 – 3	208 25 52.1 59 44.2	-35	9.997 8078 1176	6 33	16 56
23	925.5	2 5 1.887	IIO + I	209 25 36.3 59 46.5	-35	9.997 6902 1169	6 35	16 54
24	926.5	2 8 58.440	107 + 5	210 25 22.8 59 48.8	-31	9.997 5733 1161	6 36	16 52
25	927.5	2 12 54.993	+105 + 7	211 25 11 6	-24		6 38	16 50
26	928.5	2 16 51.546	103 + 6	212 25 2.6 59 51.0	-14	9.997 4572 1155	6 39	16 48
	920.5	2 20 48.100		. 59 53.4	- 2	9.997 3417 1150	. 07	16 46
27 28	929-5	2 24 44.653		213 24 55.8 59 55.5	+12	9.997 2267 1146	6 41	16 44
			99 – 1	214 24 51.3 59 57.6		9.997 1121		16 43
29	931.5	2 28 41.206	97 - 5	215 24 48.9 59 59.6	+26	9.996 9978	6 44	
30	932.5	2 32 37.760	95 - 9	216 24 48.5 60 1.7	+41	9.996 8837 1138	6 46	16 41
31	933.5	2 36 34.314	+ 94 -10	217 24 50.2 60 3.5	+55	9.996 7699 1137	6 47	16 40
Nov. I	934-5	2 40 30.868	92 - 9	218 24 53.7 60 5.3	+67	9.996 6562 1133	6 49	16 38
2	935.5	2 44 27.421	91 - 5	219 24 59.0 60 7.0	+76	9.996 5429 1129	6 51	16 36
3	936.5	2 48 23.975	89 0	220 25 6.0 60 8.6	+83	9.996 4300 1125	6 52	16 34
4	937-5	2 52 20.529	88 + 6	221 25 14.6 60 10.2	+88	9.996 3175 1117	6 54	16 33
5	938.5	2 56 17.083	87 +11	222 25 24.8 60 11.8	+89	9.996 2058 1108	6 55	16 31
6		7 0 T2 628	a Se ara	222 27 26 6	+88	9.996 0950	5000	16 29
	939.5	3 0 13.638	+ 85 +14	223 25 36.6 60 13.2			- 01	16 28
7	940.5	3 4 10.192	84 +15	224 25 49.8 60 14.7	+83	9.995 9852 1086	0,	16 26
8	941.5	3 8 6.747	84 13	225 26 4.5 60 16.3	+75	9.995 8766	7 1	
9	942.5	3 12 3.301	83 + 9	226 26 20.8 60 17.7	+66	9.995 7693 1058	7 2	16 25
10	943.5	3 15 59.856	82 + 5	227 26 38.5 60 19.2	+55	9.995 6635 1043	7 4	16 23
II	944.5	3 19 56.410	81 0	228 26 57.7 60 20.7	+43	9.995 5592 1025	7 6	16 22
12	945-5	3 23 52.965	+ 81 - 5	229 27 18.4 60 22.2	+30	9.995 4567 1008	7 8	16 21
13	946.5	3 27 49.520	8o - 8	230 27 40.6 60 23.8	+19	9.995 3559 988	7 9	16 19
14	947-5	3 31 46.075	80 -10	231 28 4.4 60 25.3	+ 9	9.995 2571 970	7 11	16 18
15	100	3 35 42.630		222 28 20 7	- i	0.005 1601	7 12	16 16
16	949.5	3 39 39.186	80 -10	222 28 76 7	-10	0.005.0650	7 14	16 15
17	950.5	3 43 35.741	80 - 7		-15	0.004.0721	7 16	16 14
			· ·	00 30.2		910		16 12
18	951.5	3 47 32.296	+ 80 - 3	235 29 55.4 60 31.9	-18	9.994 8811 889	7 17	16 1 <sub>3</sub>
19	952.5	3 51 28.852	80 + 1	236 30 27.3 60 33.6	-18	9.994 7922 869	7 19	16 11
20	953-5	3 55 25.408	80 + 5	237 31 0.9 60 254	-16	9-994 7053 851	7 20	
21	954.5	3 59 21.963	81 + 7	230 31 30.3 60 27 1	-10	9.994 6202 832	7 22	16 10
22		4 3 18.519	81 + 7	239 32 13.4 60 38.7	- I	9.994 5370 815	7 23	16 9
23	956.5	4 7 15.075	+ 82 + 5	240 32 52.1	+10	9.994 4555	7 25	16 8
							2	

		St.		0 <sup>h</sup> We	lt-Zeit		
Та	ğ	Wochentag	Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer StZt.	Halb- messer
194	.0					The last	-
Nov.	23	Sa	+13 40.07 16 84	15 53 35.01 m	20 16 16.9	69.41	16 13.85
	24	St	12 22 22	15 57 48.40	20 28 44 4	69.52	16 14.03
	25	Mo	13 5.60 18.41	16 2 2.50	20 10 10 2 12 4.0	69.63	16 14.21
	26	Di	T2 47 TO	16 6 17.56 + 24.9/	20 52 21 0	69.73	16 14.38
	27	Mi	12 28 02 19.17	16 10 22 28 4 13./2	21 3 40.4	69.83	16 14.55
	28	Do	12 8.11 20.63	T6 T4 40.74	21 14 44 1	69.93	16 14.72
	29	Fr	TT 47.48	16 10 602	-2T 25 T4 7	70.02	16 14.89
	30	Sa	77 26 76	76 02 24 87 4 1/100	21 35 21.1	70.12	16 15.05
Dez.	ı	St	21.99	76 27 12 26 4 10.33	21 45 27 9 41.0	70.21	16 15.20
2 02.	2	Mo	10 41 54	16 22 255 7 19.19	9 10.0	70.30	16 15.36
	3	Di	TO 18 28	16 26 22 26	32 3 70 7	70.38	16 15.51
	4	Mi	0 54 42	16 40 42.76	22 3 10.7 8 25.9 22 11 36.6 8 0.1	70.46	16 15.66
	5	Do	+ 0 20 02	16 45 272	-22 10 26 7	70.54	16 15.81
	6	Fr	0 5.07	16 40 25.24	22 27 10.8 7 34.1	70.61	16 15.95
	7	Sa	8 20 60	16 52 47.27	22 24 18 5	70.68	16 16.00
	8	St	8 72 64 23.90	16 58 0 78 4 22.31	22 40 50.7	70.75	16 16.22
	9	Mo	7 47 22	17 2 22.76	22 47 14.3	70.82	16 16.35
	10	Di	7 20 27	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	22 52 10	70.88	16 16.48
	11	Mi	- 6 52 10	17 II 10.00	-22 58 22.4	70.93	16 16.60
	12	Do	6 25 16 27.04	17 15 44.10	22 2 15.7 + 33.3	70.98	16 16.71
	13	Fr	F FF 45 27.99	17 20 874 + 24.33	+ 23.0	71.03	16 16.82
	14	Sa	5 57.47 <sub>28.32</sub> 5 29.15 <sub>28.62</sub>	17 24 22 6T T 24.0/	22 11 20 7	71.07	16 16.92
	15	St	5 0.53 28.88	17 28 58.70	22 15 10.2	71.11	16 17.01
	16	Mo	4 31.65 29.12	17 33 24.23 4 25.44	23 18 12.9 2 34.7	71.14	16 17.10
	17	Di	+ 1 252	17 27 40 01	$-23 20 47.6 \begin{array}{c} 2 & 34.7 \\ 2 & 6.7 \end{array}$	71.17	16 17.19
	18	Mi	2 22 10	17 42 15.80 4 26.08	23 22 54.3 1 38.5	71.20	16 17.27
	19	Do	3 3.68 29.51	17 46 41.88 4 26.22	23 24 32.8	71.22	16 17.34
	20	Fr	2 34.01 29.79	17 51 8.10 4 26.35	23 25 43.2 0 42.2	71.23	16 17.40
	21	Sa	2 4.22 29.88	17 55 34.45 4 26.43	23 26 25.4 0 13.9	71.24	16 17.46
	22	St	I 34.34 29.93	18 0 0.88 4 26.49	23 26 39.3 0 14.4	71.25	16 17.51
	23	Mo	+ I 4.4I 29.95	18 4 27.37 + 26.51	-23 26 24.0	71.26	16 17.56
	24	Di	0 34.46 29.94	18 8 53.88	23 25 42.2	71.26	16 17.61
	25	Mi	+ 0 4.52 20.88	18 13 20.37 4 26.44	23 24 31.3 1 39.1	71.25	16 17.65
	26	Do	- o 25.36 <sub>20.70</sub>	10 1/ 40.01 1 26.25	23 22 52.2 2 7.3	71.24	16 17.69
	27	Fr	0 55.15 20.66	18 22 13.16 4 26.22	23 20 44.9 2 35.5	71.22	16 17.72
	28	Sa	1 24.81 29.49	18 26 39.38 4 26.05	23 18 9.4 3 3.5	71.20	16 17.75
	29	St	- I 54.30 <sub>20.20</sub>	18 31 5.43 4 25.85	-23 15 5.9 3 31.5	71.17	16 17.78
	30	Mo	2 23.59 20.00	18 35 31.28 4 25.60	23 11 34.4 3 59.3	71.14	16 17.80
	31	Di	2 52.04 28.76	1 25 39 30.00 4 25.21	23 7 35.1 4 27.1	71.10	16 17.81
	32	Mi	- 3 21.40	18 44 22.19	-23 3 8.0	71.06	16 17.83

			01	Welt-Zeit		Auf-	Unter-
Tag	Julian. Zeit	Sternzeit	Nutation in AR. langp. kurzp Gl. Gl.	Mittleres Äquinoktium 1940.0 Länge Breite	log R	;, )+50°	gang Breite Länge
1940	2429		in 0.001	in o.o.			
Nov.23	956.5	4 7 15.075	+ 82 + 5	240 22 52 7 / # + 10	9.994 4555 708	7 25 m	16 8 m
24	957.5	4 11 11.631	82 + 1	24T 22 22 T	0.004.2757		16 7
25	958.5	4 15 8.187	83 - 4	040 04 74 9	0.004 2073		16 6
26	959.5	4 19 4.743	84 - 8	242 24 58 7 43.9 + 52	9.994 2203		16 5
27	960.5	4 23 1.299	85 -11	241 25 440 43.3 + 65	9.994 1446 757		16 4
28	961.5	4 26 57.856	85 -11	245 26 22 0 00 40.0	9.994 0701 745		16 3
-0				00 40.2	734		10 3
29	962.5	4 30 54.412	+ 86 - 8	246 37 19.0 60 49.5 + 88	9.993 9967	7 33	16 3
30	963.5	4 34 50.969	88 - 3	247 38 8.5 60 50.6 + 90	9.993 9246 710	7 35	16 2
Dez. 1	964.5	4 38 47.525	89 + 3	248 38 59.1 60 51.6 +100	9.993 8536 698		16 I
2	965.5	4 42 44.082	90 + 8	249 39 50.7 60 52.6 +101	9.993 7838 684	7 37	16 I
3	966.5	4 46 40.638	91 -12	250 40 43.3 60 53.5 +100	9.993 7154 669	7 39	16 0
4	967.5	4 50 37.195	93 +14	251 41 36.8 60 54.3 + 95	9.993 6485 653	7 40	16 0
5	968.5	4 54 33.752	+ 94 +14	252 42 27 7	9.993 5832 634	7 42	15 59
6	969.5	4 58 30.309	96 +11	252 42 31.1 60 55.1 253 43 26.2 60 55.8 78	9.993 5198 616		15 59
7	970.5	5 2 26.866	97 + 6	60	0.003.4583		15 59
8	971.5	5 6 23.423	99 + 2	255 45 18 5 30.3 4 58	0.003 3086		15 59
9	972.5	5 10 19.980	100 - 3	076 46 77 7 3/02	0.003 3412		15 58
10	973.5	5 14 16.537	102 - 7	255 45 126 00 5/.9 - 24	0.003.2861 33,		15 58
**		0	÷104 -10	258 48 12.1 60 50.2 2 22	54/	100	
11	974.5		104-10	00 59.2	9.993 2334 503	1	15 58
	975.5	( ( 0	107 -10	259 49 11.3 60 59.8 + 13	9.993 1831 477		15 58
13	976.5	**		260 50 11.1 61 0.5 + 5	9.993 1354 451		15 58
14	977.5	5 30 2.765	109 – 8	261 51 11.6 61 1.2 - 2	9.993 0903 424		15 59
15	978.5	5 33 59.322	111 - 4	262 52 12.8 61 1.9 5	9.993 0479 397		15 59
16	979.5	5 37 55.880	113 + 1	263 53 14.7 61 2.6 - 6	9.993 0082 370	7 53	15 59
17	980.5	5 41 52.437	+115 + 5	264 54 17.3 61 3.4 - 3	9.992 9712 343	7 54	15 59
18	981.5	5 45 48.994	117 + 7	265 55 20.7 61 11 + 2	9.992 9369 316	7 54	15 59
19	982.5	5 49 45.552	119 + 8	266 56 24.8 61 4.9 + 11	9.992 9053 290	7 55	16 0
20	983.5	5 53 42.109	121 + 7	267 57 29.7 61 58 + 21	9.992 8763 266	7 55	16 0
21	984.5	5 57 38.666	123 + 3	268 58 35.5 61 6.5 + 33	9.992 8497 242	7 56	16 I
22	985.5	6 и 35.224	125 - 2	269 59 42.0 61 7.2 + 47	9.992 8255 220	7 56	16 I
23	986.5	6 5 31.781	-127 - 6	277 0 40 2	9.992 8035	7 57	16 I
24	987.5	6 9 28.338	120 -10	01 8.0	0.000 7826		16 2
25	988.5	6 13 24.896	131 -11	272 2 58 + 86	0.002.7656		16 2
26		6 17 21.453	133 - 9	0. 9.2	0.002.7405	1.	16 3
27	990.5	6 21 18.010	134 - 5	9.0	0.000 5051		16 4
28	991.5	6 25 14.567	136 0	276 6 247	9.992 7351 128	7 58	16 5
29		6 29 11.125	+138 + 6	277 7 45.1 61 10.5 +111	9.992 7111 96	. 07	16 6
30	993.5	6 33 7.682	140 +10	6	9.992 7015 79		16 7
31	994.5	6 37 4.239	142 +13		9.992 6936 63	1	16 8
32	995.5	6 41 0.796	+144 +13	280 11 16.7 + 99	9.992 6873		16 9
						2*	

O h			Mit	tleres Äquin	oktiu	m 192	10.0		
Welt-Zeit	X		∆ X*)	Y		<b>∆Y</b> *)	Z		△Z*)
1940									1
Jan. o	+0.143 692 +17 276	<b>- 43</b>	0	-0.892 408 <sub>+ 2 4</sub>	+277	+4	-0.387 052 <sub>+1 082</sub>	+120	-I
I	6 60 1-1-	48	+1	0.889 914 27	277	+4	0.385 970 1 203	121	+2
2	1/ 220	54	-3	0.887 143	276	+2	0.384 767 1 322	119	-4
3		60	-5	0.881.006	276	+3	0.383 445	120	-r
4	0 1/114	64	+2	0.880 773 3 3 3	277	+1	0.382 003 1 561	119	-2
5		70	+-2	0.877 175 38		0	0.380 442 1 680	119	-1
6	10 900	<b>-</b> 76	0	- 0		+2	0 (	+118	0
	0.262.418	82		0.860 777	271	-5	0 276 061	119	+4
7 8	0.080.010	87	-3	06	17	-3	0.000 0.00	116	-4
	0 206 075		0	0.860.052	260	!	0.252.014		0
9	0 070 677	93		0.855 095 52	57 267	<u>-4</u>	0.373 014 2 150 0.370 864 3 266	117	+1
IC	10 544	98	+3	0.849 871	24 266	<del>-4</del>	0 268 =08		I
11	16 441	103	+4	5 4	90 200		2 301	115	1
12	10 772	-109	-r	-0.844381 + 57	+264	0	$-0.366217_{+2495}$	+114	-2
13	0.362 934 16 217	115	<b>-</b> 5	0.838 627	261	-3	0.363 722 2 608	113	0
14	0.379 151 16 098	119	0	0.832 612	250	-2	0.361 114 2 721	113	+5
15		124	+1	0.826 338	0	+4	0.358 393 2 833	112	4
16	0.411 223 15 844	130	-I	0.819 806 67		+1	0.355 560 2 013	110	3
17	0.427 067 15 711	133	+4	0.813 020		+5	0.352 617 3 052	109	_5
18	1 -0 442 778	-140	-3	0 00 00 00 0	1 240	+3	=( .	+108	-3
19	+15 571	143	0	0.708 602	217	—I	, , , , ,	108	+2
20	0 450 555	149	2	/5	30	-3	0 242 725	106	0
21	1 2 180 076 3 7/9	151	+4	0.782.276	242	—I	0 220 762	105	-I
22	0 504 184	158	-4		22	0	0 226 284 3 4/9	104	-2
23	149/0	161	—r	0.767.000	01	+2	0 222 707	102	-5
	-T 9			9	90		3 003		
24	1 14 045	-164	+3	-0.758595 + 87	31 +233	—I	-0.329 016 +3 787	102	-1
25		170	-4	0.749 864 8 9	63 232	+3	0.325 229 3 887	100	1
26	14 302	173	-2	0.740 901	91 228	-2	0.321 342 3 987	100	+3
27	0.577 385	177	-2	0.731 710 94	17 226	0	0.317 355 4 085	98	I
28	1 2 2 17 017	182	<u>-5</u>	0.722 293 96	41 224	+-2	0.313 270 + 182	97	C
29	0.605 453	186	-4	0.712 652 98	61 220	-1	0.309 088 4 278	96	-1
30	6TO 2TO	-190	0	-0.702 791 <sub>+10 0</sub>	Q +219	+-4	-0.304 810 -+4 372	+ 94	-4
31	0 622 777	194	+3	0.602.711	315	-I	0.300 438 4466	94	0
Febr.	0646 750	198	+4	0.682 416	95	-3	0.295 972 4 557	0.1	-3
2	0 650 225 13 1/3	204	-3	0.677.000	200	-3	0.001 415	02	+4
ŝ	0 672 206	207	0	0.661 102	206	-2	0.286 766	88	-3
,	0.685.060	211	+1	0.650.271	202	-2	0.080.020 +/3/	99	+1
	12 333		1100	11 1	24		4 025		
	+0.697 613 +12 337	-216	<del>-4</del>	-0.639 147 +11 3		+1	-0.277 204 +4 911	+ 86	1+1
6	0.709 950 12 117	220	<u>-5</u>	0.627 824		+3	0.272 293 4 996	85	+3
	0.722 067 11 894	223	-I	0.616 305	09 190	-3	0.267 297 5 078	82	—I
8		228	-3	0.604 596	188	+-3	0.262 219 5 160	82	+4
9		230	+2	0.592 699 +12		+4	0.257 059 +5 239	79	+1
10	+0.757 063	-235	-4	-0.580 618	-179	-1	-0.251 820 -3-37	+ 78	+1

<sup>\*)</sup>  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.

Оь				Mit	tleres Äquinol	ctiu	m 194	0,0		1-
Welt-Ze	eit	X		△X*)	Y		△Y*)	Z		<b>∆</b> Z*)
1940										03
Febr.	IO	+0.757 063 +11 20	-235	-4	-0.580 618 <sub>+12 260</sub>	+179	I	-0.251 820 <sub>+5 317</sub>	+78	+1
	11	0.768 264 10 96	228	-5	0.568 358 12 435	175	-2	0.246 503 +5 317	76	-I
	12	0.779 227 10 72		-5	0.555 923 12 606	171	-ı	0.241 110 5 466	73.	<u>-4</u>
	13	0.789 948		+3	0.543 317	164	0	0.235 644 5 539	73	+4
	14	0.800 426	248	-3	0.530 544	The	-2	0.230 105 5 610	71	+5
	15	0.810 656 9 98	0 4 -	-2	0.517 609 13 094	7 20	+1	0.224 495 5 678	68	+1
	16	+0.820 636	-252	-3	-0.504 515 -13 <sup>2</sup> 47	+153	4	-0.218 817 +5 745	+67	+3
	17	0.830 363	2=6	-3	0.491 268	Y 10	-3	0.213 072 5 810	65	+3
	18	0.839 834		+3	0.477 872		+2	0.207 262 5 873	63	1
	19	0.849 048 8 05		-1	0.464 330		-3	0.201 389 5 934	61	0
	20	0.858 001 8 60	261	+4	0.450 648 12 818		-3	0.195 455	59	0
	21	0.866 693 8 42		-4	0.436 830	100	+2	0.189 462 6 051	58	+3
	22	+0.875 119 + 8 16	<sub>1</sub> -265	+4	-0.422 879	128	—т		+56	0
	23	0.883 280	260	I	0.408 800	177	<u>_5</u>	0.177 304 6 160	53	-5
	24	0.891 172	250	-+I	0.394 598	121	0	0.171 144 6212	52	-1
	25	0.898 794 7 34	9 273	-I	0.380 275	2 7 7	<u>-5</u>	0.164 932 6 263	51	+4
	26	0.900 143	5 274	+3	0.305 837	113	0	0.158 669 6 312	49	+-3
	27	0.913 218 6 79	8 277	+1	0.351 286 14 658		-5	0.152 357 6 358	46	-3
	28	+0.920 016 + 6 51	9 -279	+2	-0.336 628	+104	-3	-0.145 999 +6 403	+45	-r
Mr.	29	0.926 535 6 23	280	+5	0.321 860		<u>-5</u>	0.139 596 6 446	43	0
März	1	0.932 774 5 95	284	I	0.307 005 14 956	95	<del>-4</del>	0.133 150 6 487	41	0
	2	0.938 729 5 67	284	+3	0.292 049 15 046	90	<u>-5</u>	0.126 663 6 526	39	+1
	3	0.944 400 5 38	3 288	-3	0.277 003 15 131 0.261 872	85 82	-4	0.120 137 6 563	37	+1
	+	0.949 783 5 09	15	+-2	15 213		+-4	0.113 574 6 598	35	
	5	+0.954878 + 486	5 -290	+2	-0.246 659 <sub>-15 289</sub>	+ 76	+1	—o.106 976 <sub>+6 631</sub>	+33	0
	6	0.959 683 4 51	3 292	0	0.231 370 15 360	/*	-3	0.100 345 6 661	30	-2
	7 8	0.964 196 4 22 0.968 416		+1	0.216 010	66	-5	0.093 684 6 690 0.086 994 6 717	29	+3
		3 9-		+3 +2	0.200 584 15 487	m6.	$\begin{vmatrix} -5 \\ -2 \end{vmatrix}$	0.000.000	27 24	+3 -1
	9	0.075.072	206	0	0 160 554		+4	2 252 526	22	-2
		3 33	5		*3 393			- 1.3		
	II	+0.979 308 + 3 03		-4	-0.153 959 +15 641 0.138 318 +15 681		+2	-0.066 773 +6 783 0.059 990 6 801	+20 18	-2 $-2$
	12	0.982 345 2 74	200	+3	0.138 318 15 682		+2		15	1
	13	2 20 4 40		-4 -1	0.106.017	20	+4	0.053 189 6 816 0.046 373 6 821	15	<del>-3</del> +4
	14	0.080.672	308	—I	0.091 168	27	-3  +1	0.020 542	10	-4
	16	0.989 672 0.991 518	200	-5	0.075.202	21	-2	0.039 542 6 841 0.032 701 6 851	10	+2
		1 2 2 2 2 6 7	0		*5 /9/		i 1	0.00		+2
	17	+0.993 065 + 1 24	208	-3 -4	-0.059 595 +15 813 0.043 782 +15 824		<del>-4</del>	0	+ 7	+4
	19	0.994 314 0.995 265	208	-4 -5	0.007.058		<del>-3</del> +2	0	2	-2
	20	0.005.018	3 207	$\begin{vmatrix} -5 \\ -2 \end{vmatrix}$	-0.012 126 15 832		-3	0.012 128 6 866 -0.005 262 6 868		+2
por s	21	0.006 274	207	I	10 003 708	- 3	-5	+0.001 606 +6 867	- ı	-1
	22		9 -295	+4	+0.003708 + 15831 +0.019539	- 6	+1	+0.008 473	<b>-</b> 3	-2

<sup>\*)</sup>  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.

Оъ						Mit	tleres Äq	uinol	ktiu	m 19	40.0		
Welt-2			X		121	∆ X*)	Y	7		<b>△Y*</b> ⟩	Z		∆Z*
194	.0							_					
März	22	+0.996	333	- 236	295	+4	+0.019 539	+15 825	- 6	+1	+0.008 473 <sub>+68</sub>	- 3	-2
	23	0.996	097		297	-3	0.035 364	15 814	11	0	0.015 337 68		-2
	24	0.995		533 828	295	+2	0.051 178	15 799	15	0	0.022 196 68	59	+3
	25	0.994		1 122	294	+4	0.066 977	15 799	19	0	0.029 049 68		+3
	26	0.993		1 417	295	-3	0.082 757	15 756	24	-4	0.035 894 68		-1
	27	0.992		1 417	295	-5	0.098 513	15 750	29	-5	0.042 728 6 8		+2
	28	+0.990	185	,	202	0	+0.114 240		- 31	+3			+2
	20	0.988		2 005	293 294	-3	0.129 936	+15 696	38	$\begin{bmatrix} 3 \\ -3 \end{bmatrix}$	0.056.258	76	-r
	30	0.986		2 299	293	0	0.145 594	15 658	41	+1	6	92	− <sub>5</sub>
	31	0.983		2 592	291	+4	0.161 211	15 617	47	-2	2 262 222	73	-1
April		0.980		2 883	292	-2	0.176 781	15 570	51	+1	2 246 646	53	0
11pin	2	0.977		3 175	291	-2	0.192 300	15 519	55	+3	0.082.405	31	-2
				3 466				15 464			- /	50 -	
	3	+0.974		3 754	-288	+3	+0.207 764	+15 403	— 61	-3	+0.090 113 +66	80 26	+2
	4	0.970	311.	4 043	289	-5	0.223 167	15 337	66	<u>-4</u>	0.096 793 66		+3
	5	0.966		4 330	287	-4	0.238 504	15 267	70	+1	0.103 445 66		—I
	6	0.961		4 615	285	-2	0.253 771	15 193	74	+5	0.110 066 65		0
	7	0.957		4 899	284	-2	0.268 964	15 114	79	+3	0.116 655 65	54 35	-3
	8	0.952	424	5 181	282	+1	0.284 078	15 029	85	-4	0.123 209 65	18 36	-2
	9	+0.947	243_	- 5 460	-279	+4	+0.299 107	+14 940	- 89	-3	+0.129 727 -64	<del>7</del> 9 −39	-5
	10	0.941		5 739	279	-4	0.314 047	14 847	93	+1	0.136 206 64		-3
	II	0.936	044	6 015	276	-3	0.328 894	14 749	98	+2	0.142 644 63		+4
	12	0.930	029	6 288	273	I	0.343 643	14 647	102	+4	0.149 041 6.2		-1
	13	0.923		6 560	272	-5	0.358 290	14 540	107	+3	0.155 393	16	0
	14	0.917	181	6 828	268	r	0.372 830	14 430	110	+5	0.161 699 62		+1
	15	-+-0.910	353		-267		-+0.387 260		116	r	+0.167 957 +62		+3
	16	0.903		7 095	263	+2	0.401 574	+14 314	118	+4	0.174 166 6 1	9	-2
	17	0.895		7 358	260	+3	0.415 770	14 196	123	-r	0.180 323 61	57	-r
	18	0.888		7 618	258	-1	0.429 843	14 073	127	-3	0.186 427 60	4	-1
	19	0.880	406	7 876 8 132	256	-4	0.443 789	13 946 13 816	130	0	0.192 476	-6	+2
	20	0.872	274	8 384	252	0	0.457 605	13 683	133	+4	0.198 469 5 9	ŕΧ	+2
	21	+0.863			-250	-2	+o.471 288		-127	+2			+4
	22	0.855	256 _	- 8 634	248		0.484 834	-13 546	137	0		6.	
	23	0.846	274	8 882		-3 + 1	0.498 239	13 405	141	+-5	0.016.005	15 62	
	24	0.837	218	9 126	243	-5	0.511 501	13 262		+2	0.0 57	53	1 -
	25	0.827		9 369	240	-5	0.524 616	13 115		-3	0 007 536	65	1
	26	0.818	270	9 609	238	-4	0.537 579	12 903		+3	2 222 TTO	~5 C-	
				9 847							2 2	.50	
	27	+0.808	423 _	-10 081	-234	+-2	+0.550 389	+12 651	-159	<u>-5</u>	+0.238 715 +54		1
	28	0.798	342	10 313	232	0	0.563 040	12 489	162	<u>-4</u>	0.244 202 54	.16 71	-3
	29	0.788		10 542	229	-r	0.575 529			0	0.249 618	45 71	1
Mai	30	0.777		10 769	227	-2	0.587 853		169	_I	0.254 963		
Mai	1	0.766		-10 991	222	+5	0.600 008	±11 982		-4	0.260 234 +5 1		
	2	+0.755	727		-220	+3	-⊦-o.611 990		-177	-3	+0.265 431	-77	— <sub>2</sub>

<sup>\*)</sup> AX, AY, BZ sind in Einheiten der 7. Dezimale gegeben.

0 р					Mit	tleres Äquino	ktiu	m 19	40.0		
Welt-7	Zeit	X		171	△X*)	Y		<b>△Y*</b> )	Z		∆Z*)
194	10							i			1
Mai	2	+0.755 727		-220	+3	+0.611 990	-I77	-3	+0.265 431 +5 120	- 77	-2
	3	0.744.776	11 211	216	+4	0 600 505	Y == 0	+4	0.000 001	79	-4
	4	0 500 080	11 427	213	+2	0.625 425	782	+3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	79	+3
	5	0 507 140	11 640	210	0	0616861	780	-2	0.000 554	81	+3
	6	0.700.700	11 850	205	+5	0.658 120	o ror	-5	0.285 425	82	+3
	7	0.607.544	12 055	202	+2	0.660 185	102	_i	0.200.224	84	-1
	8		i2 257	0		+0.680 057 +10.67	2		4 / 13	- 86	4
		+0.685 287 -1	12 455	-198	-1			2	+0.294 949 +4 629	- 86 86	-4
	9	- 660-	12 650	195	-4	0.690 732		-2	0.299 578 4 543	88	0
	10		12 839	189	+2	0.701 207		0	0.304 121 4455	8g	-2
	II	0.647 343	13 025	186	I	0.711 479		+2	0.308 576 4 366		-3
	12	0 60T TTT	13 207	182	-2	0.721 546 9 85		-3	0.312 942 + 275	91	4
	13	· ·	13 384	177	+3	0.731 404 9 64	7 211	-3	0.317 217 4 184	91	+2
	14	+0.607 727	13 556	-172	+5	+0.741 051 + 9 43	-214	<u>-5</u>	+0.321 401 +4 092	- 92	+4
	15	0.594 171	13 726	170	-3	0.750 484	210	-2	0.325 493 3 998	94	- <b>-I</b>
	16	0.580 445	13 890	164	+2	0.759 701	217	+3	0.329 491	94	+4
	17	0.566 555	14 050	160	+3	0.768 701 8 779	221	-2	0.333 395 3 809	95	+2
	18	0.552 505	14 206	156	+3	0.777 480 8 55		+2	0.337 204 3 712	97	<u>-3</u>
	19		14 358	152	0	0.786 038 8 333		-3	0.340 916 3 615	97	-1
	20	-0 522 04T		-149	-3	+0.794 371 <sub>+ 8 10</sub>		+4	+0.244 €21	- 98	- <del>-</del> -I
	21	0.500.424	14 507	143	+3	0.802 479 788		+4	0 248 048 (3 32)	98	+3
	22	0 404 784	14 650	141	-3	0 810 260	220	-3	0 257 467 3 419	101	-4
	23		1+791	137	-3	0.818.017	2.22	-5	0.351 407 3 318 0.354 785 3 218	100	+3
	24	66-	14 928 15 060	132	+1	0.825 430 7 18	224	-3	0.358 003 3 117	101	+4
	25	0.150.005	15 189	129	0	0.832 615 6 95		+4	0.361 120 3 014	103	+ <b>1</b>
	26	10 121 816		-124	[	1 - 0 - 0 - 66			16 1	-102	+4
	27	0.410.503	15 313	120	+3 +1	2 9 16 249		-3 + 3	0.267.046	105	-4
	28	0.404.050	15 433	117	-5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3	+5	0 260 852	105	-2
	29	0.288 520	15 550	112	$\begin{bmatrix} -5 \\ -2 \end{bmatrix}$	08-8082	244	0	2 /02	105	0
	30	0 250 050	15 662	106	+4	- 96 3 90		+1	0 077 750	107	-4
	31	0.075.500	15 768	104	-3	0 870 771	3 24 7	-r	0 277 642	107	-3
т.			15 872			3 49	57	1	2 303		
Juni	1	+0.341 218	15 970	<b>-</b> 98	+2	+0.876 210 + 5 24	7 -249	4	+0.380 025 +2 275	-108	-4
	2	0.325 248	16 063	93	+4	0.881 457 4 99	6 251	-5	0.382 300 2 166	109	-4
	3	0.309 185	16 152	89	+1	0.886 453	4 252	-2	0.384 466 2 057	109	-r
	4	0.293 033	16 236	84	0	0.891 197	1 <sup>253</sup>	+1	0.386 523 1 947	110	-1
	5	0.276 797	16 316	80	-2	0.895 688	2.55	-I	0.388 470 1 837	110	+1
	6	0 060 107	16 389	73	+4	0.899 924 3 97	257	-3	0.390 307 1 725	112	-3
	7		16 459	- <b>7</b> º	—1	+0.903 903 + 3 72	-257	+3	+0.392 032 +1 615	-110	+4
	8	0.007.600	16 522	63	+3	0.907 625		+5	0.393 647 1 502	113	-4
	9	0.017.777	16 582	60	-4	0.911 089 3 20	250	+4	0.395 149 1 390	112	0
	10	0.194 529	16 636	54	0	0.914 294	260	+2	0.396 539 1 278	112	+1
	II	a The Oca	16 684	48	+5	0.917 239 + 2 68	2,60	+3	0.397 817 +1 165	113	-2
	12			- 44	+1		<b>-26</b> 0	+3	+0.398 982	-113	-2

<sup>\*)</sup> AX, AY, AZ sind in Einheiten der 7. Dezimale gegeben.

Оъ			0.70	0 -	Mit	tleres Äquino	ktiu	m 19	40.0		100
Welt-Z		X		-11	△ X*)	Y		<b>△Y*</b> )	Z		<b>∆</b> Z*)
194	.0									1 1	No.
Juni	12	+0.161 209	6 0	- 44	+1	+0.919 924	-260	+3	+0.398 982	-113	-2
5 (1221	13	0.144 481	-16 <b>728</b>	40	-2	0.022.240	262	-3	0.400.024	113	-2
	14	0.127 713	16 768 16 801	33	+4	0.024 512	260	+3	0 100 073	113	_r
	15	0.110 912	16 832	31	$\left  -3 \right $	0.006 475	261	$-\mathbf{r}$	0.101.700	113	-2
	16	0.094 080	16 856	24	+4	0.008 0.57	262	-4	0 102 512	114	<b>—</b> 5
	17	0.077 224	16 877	21	0	0.929 437	260	+4	0.403 111 599	113	0
	18	+0.060 347		76		10000 777	-261		480	***	-1.0
			16 893	- 16	0	+0.930 557 859		+1	+0.403 597	-113	+3
	19	0.043 454	16 905	12	-I	0.931 416	262 260	-2	0.403 970 260	113	+2
	20	0.026 549	16 912	7	1	0.932 013	262	+3	0.404 230	111	-4
	21	+0.009 637	16 916		<u>-4</u>	0.932 350 75	-6-	-2	0.404 376	114	-3
	22	-0.007 279	16 914	+ 2	+1	0.932 425 _ 186	-6-	-r	0.404 408 81	113	+2
	23	0.024 193	16 908	6	0	0.932 239 448		-4	0.404 327	113	+-3
	24	-0.041 101	16 898	+ 10	-3	+0.931 791 710	-262	-2	+0.404 133 _ 308	114	-2
	25	0.057 999	16 883	15	-2	0.931 081	261	+4	0.403 825	114	-3
100	26	0.074 882	16 863	20	-1	0.930 110	261	+4	0.403 403	113	0
	27	0.091 745	16 839	0.1	-3	0.928 878	262	-2	0.402 808 649	114	-3
	28	0.108 584	16 810		-I	0.927 384	262	-4	0.402 219 762	113	0
	29	0.125 394	16 776		+1	0.925 628 2 017	261	+1	0.401 457 875	113	0
	30	-0.142 170	16 737		+3	+0.923 611	-260	+5	+0.400 582	-114	-3
Juli	1	0.158 907	16 693		+2	0.921 334 2 538	261	-  I	0.399 593	112	+3
	2	0.175 600	16 645		-I	0.918 796 2 797		+3	0.398 492	113	+1
	3	0.192 245	16 591	54	+1	0.915 999 3 957	260	-4	0.397 278 1 326	112	+2
	4	0.208 836	16 533	58	-2	0.912 942	2 40	-4	0.395 952 1 438	112	0
	5	0.225 369	16 469	6.1	+r	0.909 626 3 573	2.57	0	0.394 514 1 550	112	-2
	6	-0.241 838			0	10006000		-3	10 202 061	-111	+1
	7	0.258 238	-16 400	73	-4	3 030	~ ~ ~	-I	0.201.202	110	+2
	8	0.274 565	16 327		0	2000 700 +005		-4	0.280 =22	III	-3
	9	0.290 813	16 248	0.	+1	0 802 708 4 34	251	+4	0 287 650	109	+2
	10	0.306 978	16 165	0	+5	0 880 207 4 591	2.52	-2	0.285 650	108	+2
	II	0.323 054	16 076		+1	0.884.264 + 0+3	248	+4	0 282 560	109	-3
	12		15 984	200		+0.879 273 <sub>-5 330</sub>			2 200		+2
		-0.339 038	-15886	+ 98	+5	+0.879 273 -5 339		-I	+0.381 352 -2 315	-107 106	1
	13	0.354 924	15 785	101	+1 +1	0.873 934 0.868 350 5 584 5 584	2 . 2	+3	0.379 037 2 421 0.376 616 2 527	100	+5
	15	0.370 709 0.386 388	15 679	F-00		0 860 700	0.10	+3	0 071 080		+3
	-		15 570		-2			-2	0.374 089 2 631	104	+4
	16	0.401 958 0.417 413	15 455		+4	0.856 454 6 309 0.850 145 6 517	200	-4	0.371 458 2 736 0.368 722 2 810	104	<del>-4</del>   <del>-4</del>
			15 338		-3	○ J <del>1</del> /	230	-4	2 040		
	18	-0.432 75I	-15 216	+122	I	$+0.843598_{-6.784}$	-237	<u>-5</u>	+0.365 882 -2 942	-102	+2
	19	0.447 967	15 090	126	-r	0.836 814	221	+1	0.362 940 3 044	102	+2
	20	0.463 057	14 961	120	-4	0.829 796	222	+2	0.359 896	ICI	+3
	21	0.478 018	14 827	134	0	0.822 546	222	-5	0.350 751	100	+3
	22	0.492 845	-i4 689	138	+1	0.815 064	229	-2	0.353 506 -3 345	100	_I
	23	—o.507 534		+142	+1	+0.807 353	-227	-2	+0.350 161	<b>-</b> 99	+1

<sup>\*)</sup> AX, AY, AZ sind in Einheiten der 7. Dezimale gegeben.

O h				Mitt	leres Äquinok	tiur	n 194	0,0		
Welt-	Zeit	X		∆ X*)	Y		△Y*)	Z		∆Z*)
194	10									
Juli	23	-0.507 534 <sub>-11 547</sub>	+142	- - I	+0.807 353 - 7 938	-227	2	+0.350 161 -3 441	-99	+1
	24	0 700 001 17 34/		-2	/ 930	226	-5	2 246 MTH 3 TIT	97	+5
	25	0 526 482	TET	+4	0 10+	224	-4	0 242 TE6 3 JT	. 97	+1
	26	0 550 521	771	+1	0 = 90 960	221	+1	0 220 528	97	-3
	27	0.564.821	1.58	0	0 551 054	210	+1	0 225 802 3 /33	94	+2
	28	13 935	×60	+2	0 565 426	218	-3	0.227.074	95	-4
		13 //	)		9040			3 7-4		
	29	-0.592 546 -13 610	+166	-2	+0.756 380 _ 9 261	-215	0	+0.328 050 <sub>-4 017</sub>	-93	-2
	30	0.000 150	171	-T	0.747 119 9 473	212	+3	0.324 033 + 109	92	-I
Λ	31	0.019 595		-2	0.737 646 0.681	211	0	0.319 924 4 200	91	-2
Aug.		0.632 859 13 085	179	-3	0.727 962	207	+4	0.315 724	90	-3
	2	0.645 944	183	-3	0.718 071	205	+1	0.311 434	89	-3
	3	0.658 846	188	0	0.707 975 10 298	202	-1	0.307 055 + 466	87	+1
	+	-0.671 560	+191	-I	+0.697 677	-199	-3	+0.202.580	86	-1
	5	0 68 1 082	106	+-1	0 687 180	196	-4	0.208.025 + 332	85	-4
	6	0 606 410	TOO	+3	0656 185	193	-2	0.202.100	84	-4
	7	0.708.528	202	+4	0.665.601	188	+5	00 ( 4/41	18	+2
	8	0 500 160	200	+4	0 654 527	185	+4	4 002	81	I
	9	0.522 181	200	-3	0.642.268	183	-2	0.358.001	79	+2
		11 509			)! ++4	0		4 902		
	10	-0.743 690 <sub>-11 297</sub>		-5	+0.631 826	-178	1	+0.274 032 -5 039	<del>-77</del>	+5
	11	0.754 987 11 081 0.766 068 10 862	A	0	0.620 206 11 795 0.608 411	175	0	0.268 993 5 115	76	+4
		0.776 930		+2		172	<u>-1</u>	0.263 878 5 190	75	十工
	13			I	0.596 444 12 135	168	+3	0.258 688 5 262	72	+4
	1.4	0.787 571		0	0.584 309 12 299	164	+4	0.253 426 5 335	73	-4
	15	0.797 988 10 190	227	+2	0.572 010 12 461	162	-3	0.248 091 5 405	70	+1
	16	-0.808 178 _ 9 960	+230	+3	+0.559 549 -12 620	-159	-5	-5 473	68	+3
	17	0.818 138		0	0.546 929	154	0	0.237 213	68	2
	18	0.827 866	225	+1	0.534 155	152	-4	0.231 672 5 607	66	0
	19	0.837 359	2.28	+2	0.521 229	149	<u>-4</u>	0.226 065	64	+3
	20	0.846 614	240	0	0.508 154 12 210	144	+2	0.220 394 5 734	63	+2
	21	0.855 629 8 771	211	+2	0.494 935 13 361	142	-1	0.214 660 5 795	61	+2
	22	- 06		-4	10.40. ==4	-138	+1	10008 865	61	-3
	23	- 0		-1	0 468 075	134	+2	0.202.000	57	-+4
	24	0 997 202		-2	0 454 413	132	-4	0.107.006	58	-2
	25	0.880.220	254	0	0 440 655	127	+1	0.101.125	5+	+3
	26	0.807 001	257	+1	0 426 585	124	+2	0.185.100	54	<u>-2</u>
	27	0.004 516	258	$\begin{bmatrix} \cdot \cdot \cdot \\ -4 \end{bmatrix}$	0.412.760	119	+-5	0 750 007	52	-3
	1	/ 23/		1	1+ 135	9	, 2	0.13.		
	28	-0.911 773 <sub>- 6 994</sub>	+263	+3	+0.398 634 -14 252	-117	0	+0.172 890 <sub>-6 181</sub>	-50	-2
	29	0.918 767 6 730	264	-3	0.384 382	111	+4	0.166 709 6 230	49	<u>-4</u>
	30	0.925 497 6 464	266	-5	0.370 019	109	-2	0.160 479 6 276	46	+1
α	31	0.931 961 6 191	270	+1	0.355 547	103	+3	0.154 203	45	-1
Sept.		0.938 155 - 5 922	272	0	0.340 972 14 675	100	-+- <b>I</b>	0.147 882 -6 364	43	-2
	2	0.944 077	÷273	-5	+0.326 297	- 94	+5	+0.141 518	-4 I	-2

<sup>\*)</sup> AX, AY, AZ sind in Einheiten der 7. Dezimale gegeben.

Оъ				Mit	tleres Äquinol	ktiu:	m 19.	10.0		
Welt-Z	eit	X		△X*)	Y		<b>∆Y*</b> )	Z		△Z*)
1940										
Sept.	2	-0.944 077 -56	+273	-5	+0.326 297 _11.766	-94	+5	+0.141 518 <sub>-6 405</sub>	-41	-2
-	3	0.040.726	373 <sup>276</sup>	-2	0.311 528 14 850	, 00	$+_2$	0.135 113 6 444	39	-r
	4	0.055.000	95 278	${\mathrm{I}}$	0.296 669	86	-ı	0.128 669 6 481	37	0
	5	0.960 194	317 278	<u>_5</u>	0.281 724	80	$+_{\mathtt{I}}$	0.122 188 6 516	35	0
	6	0.965 011	36 281	0	0.266 699		-5	0.115 672 6 549	33	0
	7	0.060.547	282	0	0.251 597	77.7	-2	0.109 123 6 580	31	-2
	8	-0.072 80T	1282	$ _{-4} $	+0 226 121	-67	-3	10.700.510	-30	-4
	9	0.055.550	372	I	0.221 184	62	-4	0.005.000	27	+2
	10	0.081.461	281	-2	0.005 881	-6	0	0.080.006	25	+5
	II	0.06- 34	lo <del>1</del>	+2	0 100 530	· · ·	+3	0.080.604	23	+4
	12	200 = 002	118	0	0.177.106	F	-2	0.075.040	22	-I
	13	0.000 815	332 287	-+- I	0.150.642	16	-2	0.060.040	20	-3
		- ;	545		.5 5			0 /2/	81-	
	14	-0.993 360 0.995 617	257 288	+1	$\begin{array}{c} +0.144 \ 132 \\ 0.128 \ 582 \end{array}$		+4 +1	°/+>	16	-3
	15 16	0.007 -96	909	-2	10 30			10	14	_I
		0.000.265	579 290 289	+1	13, 02,		0	//3	13	-2
	17 18	1.000 655	390	-4	202 -22	5	+3	0.042 234 6 788	10	+3
		1 (	99 291	+1	66		+2	0.035 446 6 798 0.028 648 6 806	8	+4
	19		308 <sup>291</sup>	+1	15 09.	20	0	. 0 800	0	1 4
	20	-1.002 562 <sub>-</sub>	516 +292	+4	+0.050 363 -15 70	3 –16	0	+0.021 842 <sub>-6 813</sub>	<b>-</b> 7	—I
	21	1.003 078	223 293	+5	0.034 055	3 10	+4	0.015 029 6818	5	-2
	22	1.003 301	70 293	+1	0.018 937		3	0.008 211	<b>-</b> 3	-I
	23	1.003 231	363 293	<u> </u> -4	+0.003 211		+3	+0.001 390 6 821	0	+2
	24	1.002 868	657 294	<u>-4</u>	—0.012 510 Lf ff2	6 - 1	-3	-0.005 431 6821	0	-3
	25	T 000 011	951 294	-5	0.028 242		+2	0.012 252 6817	+ 4	+2
	26	-1.001 260 <sub>+1</sub>	+295	-3	-0.043 061	12	+4	-0.019 069 <sub>-6 812</sub>	+ 5	-1
	27	T 000 0T4	205	-4	0.000 668	¥6.	0	0.025 881 6 805	7	-4
	28	0.000 450	835 <sup>293</sup>	<b>一</b> 5	0.075 359 15 69		-3	0.032 686 6 796	9	-5
	29	0.006.628	206	+4	1 15 0/		+4	0.039 482 6 785	11	-4
	30	0.004.507	205	+5	6 6- 4 13 04	4	0	0.046 267 6 771	14	+1
Okt.	I	0.002.081	426 <sup>295</sup> 721 <sup>295</sup>	+5	0 700 007 15 01	3	-3	0.053 038 6 755	16	+1
	2				0.122 287	0	1	* 733	+17	-2
		-0.989 360 0.986 346 +3		0	-0.137 865 -15 53	6 +42	+4	$-0.059793_{-6738}$ $0.066531_{-6717}$	2.1	+3
	3	00 J	308 294	+5	15 49	0 40	+3	10 ' '	21	-2
	4	0.000.400	600 292	+1	15 43		. +3	0.073 248 6 696	25	+5
	5	0.979 438 3	891 291	-r		3 55 61	<del>-4</del>	0.079 944 6 671	26	
			100	<u>-5</u>	0.199 712	2 6-	-I	( 04)		+3
	7	0.971 367 4	468 288	-4	0.215 034 15 25	7 65	0	0 01/	220	+3
	8	-0.966 899 +4	755 +287	-1	-0.230 291 <sub>-15 18</sub>	6 +7I	+4	-0.099 877 <sub>-6 586</sub>		+5
	9	0.962 144	040 285	—I	0.245 477	2 74	-2	0.106 463 6 555		-2
	10	0.957 104	324 284	0	0.260 589	~×	<u>-5</u>	0.113 018 6 520		+2
	II	0.951 780	606 282	-1	0.275 623	83	_r	0.119 538	35	-4
	12	0.946 174 +5	886 280	-2	0.290 574 86	88	+3	0.126 023 -6 +47	38	-1
	13	-0.940 288	+280	+2	-0.305 437	÷91	0	-0.132 470	+40	0

<sup>\*)</sup>  $\mathcal{A}X$ ,  $\mathcal{A}Y$ ,  $\mathcal{A}Z$  sind in Einheiten der 7. Dezimale gegeben.

0 h				Mit	tleres Äquino	ktiu	m 19	40.0		
Welt-		X		∆X*)	Y		△Y*)	Z		∆Z*
194	10									1
Okt.	13	0.940 288	+280	+2	-0.305 437 <sub>-14 772</sub>	+ 91	0	-0.132 470 <sub>-6 407</sub> +	40	0
	14	+ 0 100	276	-4	0.320 209 14 676		+1	0.138 877 6 366	41	<del>-</del> 4
	15	0.934 122 6 442 0.927 680 6 718	276	+2	0.334 885		_I	0.145 243 6 323	43	-3
	16	0.920 962 6 993	275	+5	0.240.467	102	-4	0.151 566 6 277	46	0
	17	0.913 969 7 264	271	-2	0.363 934 14 364	100	+2	0.157 843 6 231	46	-5
	18	0.906 705 7 535	271	1+	0.378 298 14 252	117	0	0.164 074 6 182	49	0
	19	-0.899 170	+268	-2	-0.392 550 <sub>14 135</sub>		<b>+</b> 2	-0.170 256 <sub>-6 131</sub> +	51	+3
	20	0.891 367 8 070	267	<b>→</b> ·I	0.400 685	120	-r	0.176 387 6.070	52	+1
	21	0.883 297	265	+1	0.420 700 13 890		+1	0.182 466 6 024	55	+5
	22	0.874 902 8 508	263	0	0.434 590 12 761	129	+2	0.188 490 5 968	56	+1
	23	0.866 364 8 850	261	-2	0.448 351	134	+4	0.194 458	58	_I
	24	0.857 505 9 117	258	<u>-5</u>	0.461 978 13 490	TOM	-1	0.200 368 5 851	59	-4
	25	-0.848 388 <sub>+ 9 374</sub>	-257	0	-0.475 468 -13 348	+142	-ı	-0.206 219 -5 789 +	62	+2
	26	0.839 014 0.628	254	0	0.488 810	146	-I	0.212 008 5 725	64	+5
	27	0.829 386 0.881	253	+4	0.502 018	151	+2	0.217 733 5 650	66	+4
	28	0.819 505	248	-4	0.515 069 12 805	156	+4	0.223 392	67	-2
	29	0.809 376	247	0	0.527 964 12 736	TCO	-1	0.228 984 5 523	69	-5
	30	0.799 000 10 619	243	-3	0.540 700 12 572	-6.	+1	0.234 507 5 452	71	<u>-4</u>
	31	10 859	+240	-3	-0.553 272 <sub>-12 403</sub>	-1169	+4		73	-2
Nov.	1	0.777 522	236	-2	0.565 675	173	+3	0.245 338	75	0
	2	0.766 427	234	+4	0.577 905	176	-1	0.250 642	76	0
	3	0.755 098 11 558	229	0	0.589 959 11 873	181	1+1	0.255 870 5 149	79	+5
	4	0.743 540 11 783	225	-2	0.601 832 11 689	184	I	0.261 019 5 069	80	+2
	5	0.731 757 12 005	222	+1	0.613 521	188	+1	0.266 088 4 989	80	-4
	6	$-0.719752_{+12223}$	218	$+\mathbf{r}$	-0.625 022 -11 310		+2	-1 005	84	-+-4
	7	0.707 529 12 127	214	0	0.636 332 11 115		+5	0.275 982 4 821	84	0
	8	0.695 092	210	+1	0.647 447 10 917		+5	0.280 803 4 736	85	—I
	9	0.682 445 12 854	207	+5	0.658 364 10 716		+4	0.285 539 4 648	88 88	+5
	10	0.669 591 13 057 0.656 534 13 255	198	+4 -1	0.669 080 0.679 592	208	+3 +5	0.290 187 4 560 0.294 747 4 170	90	+2 +4
		- 3 ) )			10 304			+ +/~		
	12	-0.643 279 0.629 828 +13 451	+196	+3	-0.689 896 <sub>-10 094</sub>		-I	-0.299 217 -4 378 +	92	+5
	13	0.616 187	190	-3	0.699 990 9 881		<u>-4</u>	0.303 595 4 286	92	-2
	14	0.602 358	188	+2	0.709 871 9 665		<u>_5</u>	0.307 881 4 193	93 96	-3 +4
	15	0.002 350 14 012	183	I	0.719 536 9 446	219	<del>-4</del>	0.312 074 4 97	-	+1
	16	0.588 346 14 192 0.574 154 14 367	180	$\begin{vmatrix} +1 \\ -3 \end{vmatrix}$	0.728 982 9 224 0.738 206 8 900		-3	0.316 171 0.320 172 2.002	96 98	+3
		*T 3*/			0 999		-3	3 903		1
	18	-0.559 787 +14 538	160	-2	-0.747 205 - 8 772		-5	-0.324 075 -3 804 +	99	0
	19	0.545 249 14 707	169	+4	0.755 977 8 542		<u>-2</u>	0.327 879 3 705	99	<del>-4</del>
	20 2I	0.530 542 14 869	162	_4 2	0.764 519 8 308	226	+-5	3 3 5 1 3 603		+2 +2
	22	0.515 673 15 029	160 +156	+3	0.772 827 0.780 899 7 822	220	+4	- 1-0 60- 3 500	103	1
		0.500 644 	+156	+4	/ 533	239 242	+4		105	-3 o
	23	0.405 459	+150	-4	0.700 732	242	-4	0.342 004	5	1

<sup>\*)</sup> AX, AY, AZ sind in Einheiten der 7. Dezimale gegeben.

0 h				,	Mit	tleres Äqu	inok	tiun	1 1940	0.0		_
Welt-2	- (	X			△ X*)	Y			<b>△ Y</b> *)	Z		<u>⊿</u> Z*)
194	0					-						
Nov.	23	-0.485 459	-15 335	+150	-4	-o.788 732		+212	+4	-0.342 084 -3 202	4-105	0
	24	0.470 124	15 481	146	3	0.796 323	-7 59I	245	+2	0.345 376 3 185	107	+2
	25	0.454 643	15 623	142	+1	0.803 669	7 346	246	-4	0 248 561 3 103	106	-4
	26	0.439 020	15 760	137	+3	0.810 769	7 100 6 849	251	+4	0.251 640 3 0/9	110	+4
	27	0.423 260	15 700	132	+3	0.817 618	6 596	253	+4	0.354 609 2 969	108	-4
	28	0.407 368	16 019	127	+3	0.824 214		255	+3	0.257 170	112	+4
	29				+ t	-0.830 555	6 341	+258	+4	2 /49		
		-0.391 349 0.375 208	-16 141	+122		0.836 638	-6.083	260	+2	-2030	111+	-2 $-1$
Dez.	30	0.375 208	16 256	115	-4 +2	0.842 461	5 823	261	-r	0.26= 282	112	
Dez.	2	0.350 952	16 368	112		0.848 023	5 562	264	+4	0 265 505	114	+4
		0.326 112	16 472	101	<del>-4</del> +4	0.853 321	5 298	265	+4	2 290	114	+4
	3	0.320 112	16 573		+3	0.858 354	5 033	,	+5	0 000 006	116	+5
			16 668	95	+3		4 766	207		2 00/	110	1 +
	5	-0.292 871	-16 757	+ 89	-2	-0.863 120	-+ +98	-:-268	+2	-0.374 343 <sub>-1 952</sub>	+115	-2
	6	0.276 114	16 840	83	-4	0.867 618	+ 230		-2	0.376 295 1825	117	+2
	7	0.259 274	16 920	80	+4	0.871 848	3 959	271	++	0.378 130	118	+4
	8	0.242 354	16 993	73	0	0.875 807	3 688		+-2	0.379 847	116	-3
	9	0.225 361	17 062	69	- - <b>1</b>	0.879 495	3 416	277	+2	0.381 448 1 482	119	+5
	10	0.208 299	17 124	62	3	0.882 911	3 142	271	+4	0.382 930 1 363	119	+4
	II	-0.191 175	17 183	+ 59	+4	-o.886 o53	-2 869	273	-2	-0.384 293 <sub>-1 245</sub>	4-118	-2
	12	0.173 992	17 236	53	+-2	0.888 922	2 594	275	0	0.385 538 1 125	120	+1
	13	0.156 756	17 284	48	0	0.891 516	2 319	275	—ī	0.386 663	119	-4
	14	0.139 472	17 326	<b>1</b> 2	-1	. 0.893 835	2 042	2 ===	+2	0.387 669 886	120	<u>-4</u>
	15	0.122 146	17 364	38	+1	0.895 877	1 766	am6.	<u>-5</u>	0.388 555 766	120	<u>-5</u>
	16	0.104 782	17 397	33	+3	0.897 643	1 489		-5	0.389 321 646	120	<u>-5</u>
	17	-0.087 385		+ 28	+2	-0.899 132	1 211	+273	-4	-0.389 967 _ #3#	+121	-r
	18	0.069 960	-17 425	22	-r	0.900 343		278	-4	0.200.402	121	—r
	19	0.052 513	17 447	18	+3	0.901 276	933 654	2=0	0	0.390 896 404	121	—I
	20	0.035 048	17 465	13	+3	0.901 930		280	+4	0.391 179	121	—I
	21	0.017 570	17 478	6	-3	0.902 304	374	280	+4	C 201 241	122	+3
	22	-0.000 086	17 484 17 486	+ 2	+1	0.902 398	- 9 <del>1</del>	-0-	+5	0.391 381 40	122	+3
	23	+0.017 400		- 3	3	-0.002 211	,	0	+-1	0.201.200	I22	0
	24	0.034 883	17 483	10	-2	0.901 743	+68	281	-2	0.301.00	121	-5
	25	0.034 003	17 473	15	+1	0.901 743	749	281	-4	0 200 550	122	-I
	26	0.052 350	17 458	20	+4	0.899 964	1 030	281	-2	0.300.323	123	+3
	27	0.009 014	17 438		-I	0.898 653	1 311	282	+4	0.280.752	121	-4
	28	0.104 663	17 411	27 32	-r	0.897 060	1 593	281	+4	06-	121	-4
			17 379	54			1 874			012		
	29	+0.122 042	17 340		<u>_5</u>	-0.895 186	2 154	-1-280	-3	3 021	+122	+3
	30	0.139 382	17 296	44	0	0.893 032	2 433	279	<u>-5</u>	0.387 316	121	+3
	31	0.156 678	-17 247	49	+4	0.890 599	-2 711	278	-3	0.386 261 +1 176	121	+4
	32	+0.173 925	, .,	<b>-</b> 56	-I	-o.887 888		+278	+3	-0.385 085	+120	+2

<sup>\*)</sup> AX, AY, AZ sind in Einheiten der 7. Dezimale gegeben.

Frühlingsäquinoktium 20. März  $18^{\rm h}$   $24^{\rm m}$  Herbstäquinoktium 23. Sept.  $4^{\rm h}$   $46^{\rm m}$  Sommersolstitium 21. Juni 13 37 Wintersolstitium 21. Dez. 23 55 Erdnähe 2. Jan.  $6^{\rm h}$  Erdferne 4. Juli 10

			Оь	Welt-Zeit	1000
T	ag 	Aberration	Parallaxe	Mittlere Länge $L_{\odot}$	Mittlere Anomalie $M_{\odot}$
19	10			0	0
Jan.	-4	20.82	8.95	274.5832	352.67
	+6	20.82	8.95	284.4397	2.53
	16	20.81	8.95	294.2962	12.39
	26	20.79	8.94	304.1527	22.24
Febr.	.5	20.76	8.93	314.0091	32.10
	15	20.73	8.91	323.8656	41.95
	25	20.68	8.89	333.7221	51.81
März	6	20.63	8.87	343.5785	61.67
	16	20.57	8.84	353.4350	71.52
	26	20.52	8.82	3.2915	81.38
April	5	20.46	8.79	13.1480	91.23
*	15	20.40	8.77	23.0044	101.09
	25	20.34	8.75	32.8609	110.95
Mai	5	20.29	8.72	42.7174	120.80
	15	20.25	8.70	52.5739	130.66
	25	20.21	8.69	62.4303	140.51
Juni	4	20.17	8.67	72.2868	150.37
	14	20.15	8.66	82.1433	160.23
	24	20.14	8.66	91.9998	170.08
Juli	4	20.13	8.65	101.8562	179.94
	14	20.14	8.66	111.7127	189.79
	24	20.15	8.66	121.5692	199.65
Aug.	3	20.17	8.67	131.4256	209.51
	13	20.21	8.69	141.2821	219.36
- 100	23	20.25	8.70	151.1386	229.22
Sept.	2	20.29	8.72	160.9951	239.07
	12	20.34	8.75	170.8515	248.93
	22	20.40	8.77	180.7080	258.79
Okt.	2	20.46	8.79	190.5645	268.64
	12	20.52	8.82	200.4210	278.50
	22	20.57	8.84	210.2774	288.35
Nov.	1	20.63	8.87	220.1339	298.21
	11	20.68	8.89	229.9904	308.07
	21	20.73	8.91	239.8469	317.92
Dez.	I	20.76	8.93	249.7033	327.78
	11	20.79	8.94	259.5598	337.63
	21	20.81	8.95	269.4163	347.49
	31	20.82	8.95	279.2727	357.35
	41	20.82	8.95	289.1292	7.20

_		0 <sup>h</sup> Welt-Zeit											
Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter						
1940													
Jan. o	10 38 9 m s	+ 4 38.5	59 44.5 18.7	16 18.2	159.354	-3.692	20.I						
1	TT 22 27	+ 0 0.8 + 3/./	50 25.8	16 13.1 6.6	173.670	-2.724	21.1						
2	12 26 T 53 34	-433.4 + 34.2 + 15.6	FO T 8 44.0	16 65	187.775	-1.602	22.I						
3	13 19 28 53 27	- 8 40.0 T	58 34.7 28.6	15 59.2 7.8	201.660	-0.402	23.1						
4	14 13 15 53 47 14 13 15 54 21	$-12 \ 32.7 \ \frac{3}{3} \ \frac{43.7}{0.3}$	58 6.1 29.1	15 51.4 8.0	215.331	+0.803	24.I						
5	15 7 36 54 52	$-15\ 33.0 \frac{3}{2} \frac{0.3}{7.9}$	57 37.0 29.3	15 43.4 8.0	228.803	+1.944	25.1						
6	16 2 28	-17 40 0	29.3 E7 7.7	15 35.4 70	242.090	+2.961	26.1						
7	16 57 30 55 2	18 50 5	-6 ag = 29.2	15 27.5	255.200	+3.804	27.1						
8	17 52 7	-18 50 7	56 9.6 28.9	15 10.6	268.133	+4.437	28.1						
9	TX 45 40 33 33	-18 to 6	55 41.4 26.8	15 11.0	280.881	+4.837	29.1						
10	10 37 38	76 20 2 1 +1.4	55 14.6 24.2	15 4.6 7.3	293.437	+1.994	0.4						
11	20 27 42 48 12	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	54 50.4 20.4	14 58.0 5.5	305.797	+4.912	1.4						
12	21 15 54 46 34	-II 3.7 3 24.9	54 30.0 15.0	14 52.5	317.970	+4.605	2.4						
13	22 2 28 +5 34 +5 22	$-738.8\frac{3}{3}\frac{24.9}{41.0}$	54 15.0 8.1	14 48.4	329.975	+4.096	3.4						
14	22 47 50 44 46	$-357.8_{348.9}$	54 6.9	14 46.2	341.850	+3.412	4.4						
15	23 32 36 44 48	$- \circ 8.9 \frac{3}{3} \frac{19.3}{49.3}$	54 7.0 0.5	14 46.2	353.652	+2.583	5.4						
16	0 17 24 45 30	+ 3 40.4 3 42.3	54 16.5	14 48.8	5.448	+1.643	6.4						
17	1 2 54 46 56	+ 7 22.7 3 27.7	54 36.0 29.8	14 54.1 8.1	17.321	+0.623	7.4						
18	1 49 50 <sub>48 59</sub>	+10 50.4 3 4.0	55 5.8 39.4	15 2.2 10.8	29.363	-0.438	8.4						
19	2 38 49 51 33	+13 54.4 2 20 1	55 45.2	15 13.0	41.665	-1.502	9.4						
20	3 30 22 54 23	+16 24.5 1 44.6	56 32.9 53.4	15 26.0 14.5	54.318	-2.522	10.4						
21	4 24 45 57 2	+18 9.1 0 47.3	57 26.3 55.5	15 40.5 15.1	67.395	-3.443	11.4						
22	5 21 47 59 8	+18 56.4 <del>- 19.7</del>	58 21.8 53.0	15 55.6	80.945	-4.205	12.4						
23 .	6 20 55 60 15	+18 36.7 1 31.4	59 14.8 45.3	16 10.1 12.3	94.973	-4.743	13.4						
24	7 21 10 60 17	+17 5.3 2 40.5	60 0.1	16 22.4 8.9	109.436	-4.998	I4.4						
25	8 21 27 59 25	+14 24.8	60 32.8 16.8	16 31.3 4.6	124.235	-4.928	15.4						
26	9 20 52 58 6	+10 45.6 4 20.9	60 49.6 0.5	16 35.9 0.1	139.228	<b>-4.521</b>	16.4						
27 28	10 18 58 56 44	+ 6 24.7 4 43.0	60 49.1 16.7	16 35.8 4.6	154.252 169.154	-3.800 $-2.823$	17.4						
20	11 15 42 55 38 12 11 20	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	60 32.4 29.6	16 31.2 8.1 16 23.1	183.812	-2.623 $-1.672$	19.4						
30	54 57	_ 7 27 4	30.5	16 127	198.150	o.436	20.4						
31	14 0 58 34 41	TT 08 2	F8 4T 2 T3.0	16 00	212.140	+0.798	21.4						
Febr. 1	TA CC 28 3T T		F7 F7 4 T3.9	11.9	225.788	+1.958	22.4						
2	TE EO 20	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	57 15.3 38.8	15 27 5 11.3	239.123	0	23.4						
3	T6 44 F4 3T 3T	-18 27.8 0 25.7	56 36.5 34.6	15 26.9 9.4	252.183	+3.828	24.4						
4	17 38 57 53 6	$-18 53.5_{\circ 31.6}$	56 36.5 34.6 56 1.9 30.3	15 17.5 9.4	265.008	+4.463	25.4						
5	18 32 3 51 14	-18 21.9	55 31.6 26.1	15 9.3 7.2	277.630	+4.868	26.4						
6	19 23 47 <sub>50 8</sub>	1 -10 57.7	55 5.5 22.I	15 2.1 6.0	290.077	+5.034	27.4						
7	20 13 55 48 27	-14 47·9 3 17 3	54 43.4 18.0	14 56.1	302.366	+4.964	28.4						
8	21 2 22 46 57	12 0.7	54 25.4 13.8	14 51.2	314.513	+4.667	29.4						
9	21 49 19 45 45	43.3 2 24 7	54 11.6 9.1	14 47.5 2.5	326.530	+4.165	0.7						
10	22 35 4	- 5 10.6 <sup>3 34.7</sup>	54 2.5	14 45.0	338.439	+3.482	1.7						

	01	oere :	Kulminat	tion in	Gre	enwich		o <sup>h</sup> Län	ge, +	50° Bi	reite
Tag	AR.	Ände- rung für 1 <sup>h</sup> westl. Länge	Ďekl.	Ände- rung für 1h westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1h westl. Länge	Auf- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	Unter-	Ände- rung für 1 <sup>h</sup> westl. Länge
1940											- 10
Jan.	10 47 46	142	+ 3 50.2	-11.9	59.7	4 13.0	2.19	22 52 m	3.2	10 38 m	I.2
1		139	- o 58.1	12.0	59.4	5 5.0	2.15		_	11 7	1.2
2		138	- 5 39.0	-11.3	58.9	5 56.3	2.13	0 7	3.1	11 35	1.2
		139	- 9 56.1	-10.0	58.4	6 47.6	2.15	I 2I	3.0	12 5	1.3
	1 14 30 31	141	-13 35.4	- 8.2	57.9	7 39.4	2.18	2 33	2.9	12 39	1.5
	5 15 27 3	142	-16 24.8	- 5.9	57.4	8 31.9	2.20	3 42	2.8	13 17	1.7
(	5 16 24 4	143	-18 15.4	- 3.3	56.9	9 24.8	2.21	4 47	2.6	14 0	1.9
	7 17 21 1	142	-19 1.8	- o.6	56.4	10 17.6	2.19	5 45	2.3	14 49	2.2
	8 18 17 12	139	-18 43.8	+ 2.0	55.9	11 9.7	2.15	6 37	2.0	15 44	2.4
	9 19 11 53	134	-17 26.0	+ 4.4	55.5	12 0.3	2.07	7 21	1.7	16 43	2.5
I	0 20 4 37	129	-15 16.4	+ 6.3	55.0	12 49.0	1.98	7 59	1.4	17 45	2.6
I		124	-12 25.4	+ 7.8	54.6	13 35.5	1.90	8 31	1.2	18 47	2.6
I	2 21 43 53	120	-9 3.7	+ 8.9	54.3	14 20.1	1.83	8 59	T.I	19 49	2.6
I		116	- 5 21.5	+ 9.6	54.2	15 3.2	1.78	9 24	1.0	20 51	2.6
ı		115	— I 28.0	+ 9.9	54.1	15 45.4	1.75	9 47	1.0	21 53	2.6
I		115	+ 2 28.7	+ 9.8	54.2	16 27.3	1.76	10 10	1.0	22 54	2.6
1		118	+ 6 20.5	+ 9.5	54.5	17 9.8	1.79	10 33	1.0	23 57	2.6
I		122	+ 9 59.4	+ 8.7	55.0	17 53.7	1.87	10 58	1.1		
I	8 2 27 43	128	+13 16.0	+ 7.6	55.6	18 39.6	1.97	11 26	1.2	1 0	2.6
I		136	+15 59.3	+ 6.1	56.4	19 28.2	2.09	11 58	1.5	2 3	2.7
2		143	+17 56.5	+ 3.7	57.3	20 20.0	2.22	12 37	1.8	3 7	2.6
2		151	+18 54.2	+ 1.0	58.3	21 14.7	2.34	13 23	2.1	4 9	2.5
2	2 6 16 26	155	+18 40.6	- 2.2	59.2	22 12.0	2.42	14 18	2.5	5 8	2.4
2	3 7 19 5	157	+17 9.6	- 5.4	60.0	23 10.5	2.45	15 24	2.9	6 3	2.1
2	4	_						16 36	3.1	6 50	1.8
	5 8 21 49	156	+14 23.5	- 8.3	60.6	0 9.1	2.43	17 54	3.3	7 31	1.6
	6 9 23 36	153	+10 34.3	-10.6	60.8	r 6.8	2.38	19 14	3.3	8 7	1.4
2	7 10 23 52	150	+ 6 1.1	-12.0	60.8	2 3.0	2.31	20 34	3.3	8 39	1.3
2	8 11 22 37	145	+ I 6.3	-12.4	60.5	2 57.6	2.25	21 52	3.2	9 9	1.2
2	9 12 20 11	143	- 3 47.6	-11.9	60.0	3 51.1	2.21	23 8	3.1	9 39	1.3
3	0 13 17 5	142	- 8 21.0	-10.7	59.3	4 43.9	2.19			10 10	1.3
	1 14 13 44		-12 17.7	- 8.9	58.5	5 36.5	2.19	0 22	3.0	10 43	1.4
Febr.		142	-15 25.3	- 6.7	57.8	6 29.1	2.19	I 33	2.9	11 19	1.6
	2 16 7 6		-17 35.4		57.0		2.19	2 40	2.6	12 0	1.8
	3 17 3 31	1	$-18 \ 43.2$	- i.5	56.4		2.17	3 40	2.4	12 47	2.1
	4 17 59 13		-18 48.0	+ 1.1	55.8	9 5.6	2.13	4 33	2.1	13 39	2.3
	5 18 53 39		-17 53.1	+ 3.5	55-3	9 56.0	2.07	5 19	1.8	14 36	2.4
	6 19 46 26		-16 4.8		54.9	10 44.7	1.99	5 59	1.5	15 35	2.5
	7 20 37 23		-13 31.7		54.6	11 31.6	1.92	6 33	1.3	16 37	2.6
	8 21 26 34		-IO 23.7		54.3	12 16.7	1.85	7 2	1.2	17 39	2.6
	9 22 14 14		- 6 50.8		54.1		1.79		1.1	18 41	
1	23 0 50		- 3 2.5						1.0	19 43	
	, 0		, ,	. , , ,	, , ,	1 0 1-79	, ,,	. , 55	1	, , 73	1

		01	Welt-Zeit	t i i i i i i i i i i i i i i i i i i i	=10		
Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1940						1.	
Febr. 10	22 35 4 m s	- 5 10.6	54 2.5 2.	14 45.0	338.439	+3.482	1.7
II	22 20 2 TT 37	- I 25 I	52 50 0	T4 140	350.266	+2.651	2.7
12	0 4 40	$+$ 2 22.9 $\frac{3}{3}$ 48.0	54 10	14 44.8 0.8	2.051	+1.706	3.7
13	0 49 54 46 o	$+6$ 5.7 $\frac{3}{3}$ $\frac{42.8}{29.8}$	54 12.2 18.7	14 47.6	13.846	+0.685	4.7
14	1 35 54 47 30	$+935.5_{3}^{329.8}$	54 30.9 27.8	14 52.7 7.6	25.715	-0.375	5.7
15	2 23 24 49 30	+12 44.2 2 38.8	54 58.7 37.1	15 0.3 10.1	37.735	-1.434	6.7
16		+15 23.0	77 - 70	15 10.4	49.989	-2.449	, , , , , , , , , , , , , , , , , , ,
17	1 1 1 1 5 5 5 6	-1-17 22 2	55 35.8 45.8 56 21.6	15 10.4 12.5	62.565	3.372	7.7 8.7
18	1 50 6 34 21	9.0	53.1	TE 27 1	75.543	-4.154	9.7
19	30	+T8 42 T	F8 T2 5 57.0	1 E E 2 T 13.7	88.986	-4.739	10.7
20	6 54 8	1 7 46 2 33.9	50.4	16 00 13.9	102.929	-5.069	11.7
21	7 52 22 39 23	+15 41.6	60 4.7 53.0	16 23.7 11.8	117.357	-5.095	12.7
22	8 53 II 50 II	+12 32.6	60 48.2	76 25 -	132.202	-4.785	13.7
23	39 1+	+ 8 20.5	6 27.7	76 10 T	147.339	-4.138	14.7
24	TO 50 55	+ 2 52 0 4 3/.5	6T 24 2	16 15 1	162.601	-3.191	15.7
25	TT 48 45 37 40	-0.58.8 + 51.8	61 124	T6 40 T	177.810	-2.018	16.7
26	70 45 50 3/ 44	- 5 12 2 4 44.4	60 42 5	16 240	192.804	-0.718	17.7
27		-ro of + 1/.4	FO E8 8 +3./	16 22 T	207.462	+0.603	18.7
28	74 20 25	3 34.7	51.9	14.2		+1.853	•
	14 39 27 56 17	$-13 \ 35.3 = 41.3$ $-16 \ 16.6$	59 6.9 58 12.2 54.7	16 7.9 14.9	221.713	+2.957	19.7
März 1	15 35 44 55 44 16 31 28 54 40		F7 T8 0 55-5	15 53.0 14.5 15 38.5 12.2	235·537 248.950	+3.864	21.7
2	T= 26 T7 34 49	-17 58.7	56 30.1	15 25.2	261.992	+4.544	22.7
3	18 TO 48 33 31	-T8 22 0	EE 17 8 44.3	TC T2 5	274.716	+4.980	23.7
4	70 77 11 51 50	TH TO 6	55 T26	T= 4 T	287.179	+5.171	24.7
	50 13	1 50.0	27.9	7.0			
5	20 I 57 48 31	-15 15.8 <sub>2 35.4</sub>	54 44.7 21.1	14 56.5 5.8	299.432	+5.120	25.7
- 6	20 50 28 47 1	-12 40.4 3 5.7	54 23.6	14 50.7 4.0	311.524	+4.841	26.7
7 8	21 37 29 45 53	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	54 8.8 9.0	14 46.7	323.495	+4.351 +3.675	27.7 28.7
	22 23 22 45 8	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	53 59.8 3.7 53 56.1 1.5	14 44.3 1.1	335·378 347·206	+2.842	29.7
9	23 8 30 44 5 <sup>2</sup> 23 53 22 45 5	T 20 2	F2 F7 6	14 43.2 0.4 14 43.6	359.009	+1.887	0.9
	73 3	3 43.0	0,0	9			
II	0 38 27 45 48	+ 5 3.8 3 32.5	54 4.4 12.4	14 45.5	10.820	+0.848	1.9
12	1 24 15 46 59	+ 8 30.3	54 16.8 18.7	14 48.9 5.1	22.677	-0.234	2.9
13	2 11 14 48 34	111 49.0 2 462	54 35.5 25.6	14 54.0 6.9	-	-1.316	3.9
14	50 26	T14 34.0 2 8 2	55 1.1 32.8	15 0.9 9.0	46.722	-2.354	4.9
15	3 50 14 52 25	+16 43.3 1 23.0	55 33.9 40.3	15 9.9 11.0	59.027 71.606	-3.302	5.9
16	4 42 39 54 20	+18 6.3 0 29.3	56 14.2 47.1	15 20.9 12.8		-4.114	6.9
17	5 36 59 55 56	+18 35.6 0 30.6	57 1.3 52.4	15 33.7 14.3	84.528	-4.742	7.9
18	6 32 55 57 4	+10 5.0	57 53.7 cc.1	15 48.0	97.850	-5.138	8.9
19	7 29 59 57 42	+10 30.9 2 26.6	58 48.8 53.7	16 3.0 14.6	111.614	-5.257	9.9
20	8 27 41 57 55	+13 54.3 2 22 8	59 42.5 47.2	16 17.6 12.9	125.829	-5.065	10.9
21	9 25 36 57 55	T10 21.5 4 17.1	60 29.7 35.1	16 30.5 9.5	140.462	-4·543	11.9
22	10 23 31 37 33	+ 6 4.4	61 4.8	16 40.0	155.431	-3.704	12.9

	Obere Kulmination in Greenwich oh Länge, + 50° Breite										
Tag	AR.	Ände- rung für 1h westl. Länge	Dekl.	Ände- rung für 1h westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1h westl. Länge	Auf- gang	Ände- rung für 1h westl. Länge	Unter- gang	Ände- rung für 1h westl. Länge
1940											
Febr.10	23 0 50°	116	- 3° 2.5	+ 9.7	54.0	13 42.9	I.76	7 53	I.O	19 43	2.6
1:	1	115	+ 0 52.0	+ 9.8	54.0	14 24.9	1.75	8 15	1.0	20 44	2.6
I		116	+ 4 44.3	+ 9.5	54.1	15 7.0	1.77	8 39	1.0	21 45	2.6
I	1 20 7	119	+ 8 26.1	+ 8.9	54.4	15 49.9	1.82	9 3	1.0	22 47	2.6
I	2 8 31	123	+11 48.5	+ 7.9	54.8	16 34.3	1.89	9 29	1.2	23 49	2.6
I	2 58 57	129	+14 42.5	+ 6.5	55.4	17 20.7	1.98	9 59	1.3		_
10	3 51 54	136	+16 57.4	+ 4.7	56.2	18 9.5	2.09	10 33	1.6	0 52	2.6
I'	4 47 37	143	+18 21.9	+ 2.3	57.1	19 1.2	2.21	11 14	1.9	I 53	2.5
18	5 45 58	149	+18 44.9	- 0.5	58.0	19 55.4	2.31	12 4	2.2	2 52	2.4
I	6 46 26	153	+17 57.5	- 3.5	59.1	20 51.8	2.38	13 2	2.6	3 47	2.2
20	7 48 9	155	+15 55.7	- 6.6	60.0	21 49.4	2.41	14 9	3.0	4 37	2.0
21	8 50 11	155	+12 43.5	- 9.3	60.8	22 47-3	2.41	15 24	3.2	5 21	1.7
22	9 51 48	153	+ 8 33.3	-11.4	61.3	23 44.9	2.38	16 42	3.3	5 59	1.5
23		_		_			_	18 4	3.4	6 35	1.4
24	10 52 38	151	+ 3 44.7	-12.5	61.4	0 41.6	2.35	19 25	3.4	7 7	1.3
25	11 52 39	149	— 1 18.6	-12.6	61.2	I 37.5	2.32	20 46	3.3	7 38	1.3
26	12 52 2	148	<b>-</b> 6 12.1	-11.7	60.6	2 32.8	2.30	22 4	3.2	8 9	1.4
27	13 51 2	147	—10 34.5	-10.0	59.9	3 27.7	2.28	23 19	3.0	8 43	1.5
28	14 49 44	146	-14 8.9	— 7.8	59.0	4 22.3	2.27		_	9 19	1.6
29	15 48 3	145	-16 44.2	- 5.1	58.0	5 16.5	2.25	0 29	2.8	10 0	1.8
März 1	16 45 39	143	—18 <b>15.0</b>	- 2.4	57.1	6 10.1	2.21	I 33	2.5	10 45	2.0
2	17 42 8	139	-18 40.9	+ 0.2	56.3	7 2.4	2.15	2 29	2.2	11 36	2,2
3	18 37 4	135	-18 5.4	+ 2.7	55.6	7 53.3	2.08	3 18	1.9	12 31	2.4
4	19 30 9	130	$-16\ 35.2$	+ 4.8	55.0	8 42.3	2.00	3 59	1.6	13 30	2.5
5	20 21 19	126	-14 18.5	+ 6.5	54.6	9 29.4	1.93	4 35	1.4	14 30	2.5
6	1	121	-II 24.3	+ 7.9	54.3	10 14.7	1.85	5 5	1.2	15 31	2.6
7	21 58 35	118	- 8 2.0	+ 8.9	54.1	10 58.5	1.80	5 33	I.I	16 33	2.6
8	22 45 25	116	<b>-</b> 4 20.8	+ 9.5	54.0.	11 41.3	1.77	5 57	1.0	17 35	2.6
9	23 31 40	115	- o 29.5	+ 9.7	53.9	12 23.5	1.76	6 21	0.1	18 36	2.6
IC	0 17 54	116	+ .3 23.1	+ 9.6	54.0	13 5.7	1.76	6 44	1.0	19 37	2.6
11	I 4 4I	118	+ 7 7.9	+ 9. <b>1</b>	54.2	13 48.4	1.80	7 8	1.0	20 39	2.6
12	I 52 32	121	+10 36.2	+ 8.2	54.5	14 32.2	1.86	7 34	I.I	21 41	2.6
13	2 41 58	126	+13 38.6	+ 6.9	54.8	15 17.6	1.93	8 2	1.3	22 42	2.5
14		131	+16 5.5	+- 5.2	55.4	16 4.9	2.02	8 34	1.5	23 43	2.5
15	4 26 57	137	+17 47.0	+ 3.1	56.0	16 54.4	2.11	9 12	1.7		_
16	5 22 42	142	+18 33.5	+ 0.7	56.8	17 46.1	2.19	9 57	2.0	0 42	2.4
17	6 20 21	146	+18 17.2	- 2.I	57.7	18 39.6	2.27	10 50	2.4	I 37	2.2
18	7 19 24	149	+16 53.0	- 4.9	58.6	19 34.6	2.31	11 50	2.7	2 27	2.0
19	8 19 15	150	+14 20.8	<b>—</b> 7.7	59.6	20 30.3	2.33	12 59	3.0	3 12	1.8
20	9 19 25	151	+10 46.6	-10.1	60.4	21 26.4	2.34	14 13	3.2	3 52	1.6
21	10 19 36	150	+ 6 22.9	-r1.8	61.0	22 22.5	2.33	15 31	3.3	4 28	1.4
22	11 19 45	150	+ 1 28.6	-12.6	61.4	23 18.5	2.34	16 52	3.4	5 1	1.3
										3	

	T		О.р.	Welt-Zeit	;			_
Tag		Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1940								
März		10 23 31 m	+ 6 4.4 0 112	61 4.8 18.2	16 40.0	155.431	-3.704	12.9
	23	11 21 25 57 58	+ I 20.2 4 50.7	$61 23.0 \frac{18.2}{1.6}$	16 45.0	170.610	-2.594	13.9
	24	12 19 23 58 11	$-330.5\begin{array}{ c c c c c c c c c c c c c c c c c c c$	61 21.4 21.6	16 44.6 5.9	185.840	-1.295	14.9
	25	13 17 34 58 23	- 8 6.0 4 o.o	60 59.8 38.7	16 38.7 10.6	200.955	+0.088	15.9
	26	14 15 57 58 23	$-12  ext{ 6.0 } \frac{1}{3}  ext{ 8.9}$	60 21.1 50.8	16 28.1	215.807	+1.441	16.9
	27	15 14 20 57 56	-15 14.9 <sub>2 7.8</sub>	59 30.3 57.3	16 14.3 15.6	230.287	+2.669	17.9
	28	16 12 16	-17 22.7 1 3.2	58 22 5	15 58.7	244.332	+3.698	18.9
	29	17 9 12 55 22	-18 25.9 ° 0.3	57 34.8 54.8	15 42.8	257.925	+4.482	19.9
	30	18 4 34 53 22	$-18\ 26.2$	56 40.0 48.4	15 27.9	271.086	+5.003	20.9
	31	18 57 56 51 13	-17 29.5 1 45.8	55 51.6 40.1	15 14.7 10.9	283.859	+5.259	21.9
April	I	19 49 9 40 11	$-15\ 43.7_{2\ 26.2}$	55 11.5 31.1	15 3.8 8.5	296.307	+5.259	22.9
	2	20 38 20 47 23	$-13 17.5_{257.9}$	54 40.4 22.2	14 55.3 6.0	308.498	+5.020	23.9
	3	21 25 43 46 3	-10 10.6 3 21.3	54 18.2	14 49.3 3.8	320.500	+4.564	24.9
	4	22 11 46	$-658.3_{336.8}$	54 4.6 60	14 45.5 1.6	332.377	+3.916	25.9
	5	22 56 57 44 52	$= 3 21.5_{2.41.6}$	53 58.6 0.7	14 43.9 0.2	344.188	+3.104	26.9
	6	23 41 49	+ 0 23.1 3 44.6	53 59.3 6.6	14 44.1 <sub>1.8</sub>	355.982	+2.160	27.9
	7	0 26 54 45 47	+ 4 7.7 3 36.2	54 5.9 11.6	14 45.9 3.2	7.805	+1.122	28.9
	8	1 12 41 46 55	+ 7 43.9 3 19.3	54 17.5 16.3	14 49.1 4.4	19.694	+0.028	0.2
	9	1 59 36 48 26	+11 3.2 2 53.2	54 33.8 20.7	14 53.5 5.7	31.685		1.2
	10	2 48 2	+13 50.4 2 18 1	54 54.5	14 59.2 6.8	43.809		2.2
	II	3 38 11 51 53	+16 14.5 1 34.2	55 19.6 29.6	15 6.0 8.0	56.100	-3.127	3.2
	12	4 30 4 53 27	+17 48.7 0 42.5	55 49.2 34.2	15 14.0 9.4	68.593		4.2
	13	5 23 31 54 40 6 18 11 55 27	+18 31.2 0 14.7 +18 16.5 14.6	56 23.4 38.7	15 23.4 10.5	81.325	-4.650	5.2 6.2
	14	55 27	+18 10.5 i 14.6	57 2.1 42.6	15 33.9 11.6	94.333	-5.101	0.2
	15	7 13 38 55 49	+17 1.9 2 13.8	57 44.7 44.8	15 45.5 12.2	107.651	-5.292	7.2
	16	8 9 27 55 54	+14 48.1 3 8.1	58 29.5 44.7	15 57.7 12,2	121.307	-5.194	8.2
	17	9 5 21 55 55	+11 40.0 3 53.8	59 14.2	16 9.9 11.2	135.311		9.2
	18	10 1 16 56 4	+ 7 46.2 4 26.6	59 55·3 33·2 60 28.5 33·2	16 21.1 9.1	149.652		10.2
	19 20	10 57 20 56 30 11 53 50	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	60 10 1	16 30.2 16 35.9 1.4	179.140		12.2
		57 14	1 1 1 1 1	3.2				
	21	12 51 4 58 7	- 6 4.I <sub>4 17.4</sub>	60 54.6	16 37-3 3.3	194.101		13.2
	22	13 49 11 58 54	—10 21.5 3 35.5	60 42.5 28.9	16 34.0 7.9	209.041	1 0	14.2
	23	14 48 5 59 17	-13 57.0 <sub>2 38.5</sub>	60 13.6 42.4	16 26.1 11.6	223.824	1	15.2
	24	15 47 22 58 54 16 46 16 57 40	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	59 31.2 51.4	16 14.5 14.0	238.329 252.465		16.2
	25 26	17 43 56 57 40	- 0 43.4	58 39.8 55.3 57 44.5 54.2	16 0.5 15.0	266.180		
		JJ T-	, , ,	34.3	15 45.5 14.8			
	27	18 39 37 53 17	-17 56.0 1 32.4	56 50.2 49.6	15 30.7 13.6	279.459		19.2
	28	19 32 54 50 47	-10 23.0 2 17.0	50 0.0	15 17.1 11.4		+5.269	
	29	20 23 41 48 31	-14 6.6 2 51.5	55 18.5 33.0	15 5.7 9.0	304.834		
Mai	30	21 12 12 46 44 21 58 56 45 30	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	54 45.5 23.1	14 56.7 6.3 14 50.4 +6	317.046		
ı, Lαι	2		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	54 22.4 13.2 54 9.2	14 50.4 3.6		+3.323	
	2	1 22 44 20	7 -4.0	1 34 9.2	1 -4	1 342,090	1 . 3.3.3	1 -4.2

_		Obere Kulmination in Greenwich ob Länge, + 50° Brei										eite
7	Tag	AR.	Ände- rung für 1h westl. Länge	Dekl.	Ände- rung für ih westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1 <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für 1h westl. Länge	Unter- gang	Ände- rung für 1 <sup>h</sup> westil. Länge
19	940											100
Mä:	TZ 22	11 19 45	150	+ I 28.6	-12.6	61.4	23 18.5	2.34	16 52 m	3.4	5 I	I.3
	23		_		-	-		_	18 14	3.4	5 33	1.3
	24	12 19 59	151	- 3 33.4	-12.4	61.4	0 14.7	2.34	19 34	3.3	6 4	1.4
	25	13 20 27	151	— 8 18 <b>.</b> 8	-11.2	61.0	I 11.0	2.35	20 54	3.2	6 37	1.4
	26	14 21 8	152	-12 25.0	<b>- 9.2</b>	60.3	2 7.6	2.36	22 9	3.0	7 14	1.6
	27	15 21 47	151	-15 34.8	<b>— 6.6</b>	59.4	3 4.2	2.35	23 18	2.7	7 54	1.8
	28	16 21 51	149	-17 37.8	— 3·7	58.4	4 0.2	2.31		_	8 39	2.0
	29	17 20 41	145	—18 3o.9	— o.8	57.4	4 54.9	2.25	0 20	2.4	9 29	2.2
	30	18 17 39	140	-18 17.5	+ 1.9	56.5	5 47.8	2.16	I 13	2.0	10 25	2.4
	31	19 12 19	134	-17 4.8	+ 4.1	55.7	6 38.4	2.06	I 57	1.7	11 23	2.5
Apı	ril 1	20 4 37	128	-15 2.3	+ 6.0	55.0	7 26.6	1.96	2 35	1.5	12 23	2.5
	2	20 54 43	123	-12 19.8	+ 7.5	54.5	8 12.6	1.88	3 7	1.3	13 24	2.5
	3	21 43 I	119	<b>-</b> 9 6.9	+ 8.5	54.2	8 56.9	1.82	3 36	I.I	14 26	2.5
	4	22 30 2	116	- 5 32.4	+ 9.3	54.0	9 39.8	1.77	4 I	1.0	15 27	2.6
	5	23 16 21	115	— I 45.0	+ 9.6	54.0	IO 22.I	1.75	4 25	1.0	16 28	2.6
	6	0 2 33	116	+ 2 7.2	+ 9.7	54.0	11 4.2	1.76	4 49	1.0	17 29	2.6
	7	0 49 15	118	+ 5 55.4	+ 9.3	54.2	11 46.8	1.80	5 13	1.0	18 31	2.6
	8	1 36 58	121	+ 9 30.4	+ 8.6	54-4	12 30.5	1.86	5 38	I.I	19 33	2.6
	9	2 26 10	125	+12 42.7	+ 7.4	54.7	13 15.6	1.92	6 5	1.2	20 36	2.6
	10	3 17 10	130	+15 22.1	+- 5.8	55.1	14 2.6	2.00	6 36	1.4	21 37	2.5
	II	4 10 6	135	+17 18.5	+ 3.8	55.6	14 51.4	2.08	7 12	1.6	22 36	2.4
	12	5 4 52	139	+18 22.7	+ 1.5	56.2	15 42.1	2.15	7 55	1.9	23 32	2.2
	13	6 I 9	142	+18 27.4	- 1.1	56.8	16 34.3	2.20	8 44	2.2		-
	14	6 58 28	144	+17 28.2	<b>—</b> 3.8	57.5	17 27.5	2.23	9 41	2.5	0 23	2.0
	15	7 56 18	145	+15 24.7	- 6.4	58.3	18 21.3	2.24	10 45	2.8	1 8	1.8
	16	8 54 17	145	+12 21.2	- 8.8	59.1	19 15.2	2.25	11 55	3.0	1 49	1.6
	17	9 52 17	145	+ 8 26.3	-10.7	59.8	20 9.1	2.25	13 8	3.1	2 25	1.4
	18	10 50 26	146	+ 3 53.6	11.9	60.4	21 3.1	2.26	14 25	3.2	2 58	1.3
	19	11 49 1	147	- 0 59.3	-12.3	60.8	21 57.6	2.28	15 44	3.3	3 29	1.3
	20	12 48 22	150	- 5 51.3	-11.8	60.9	22 52.9	2.33	17 4	3.3	4 0	1.3
	21	13 48 44	152	-10 19.7	-10.4	60.7	23 49.2	2.37	18 24	3.3	4 31	1.4
	22		_		_			_	19 42	3.2	5 6	1.5
	23	14 50 0	154	-14 3.I	- 8. <b>1</b>	60.2	0 46.3	2.39	20 56	2.9	5 44	1.7
	24	15 51 38	154	-1644.5	<b>—</b> 5⋅3	59.5	1 43.9	2.39	22 3	2.6	6 27	1.9
	25	16 52 47	151	-18 14.5	- 2.2	58.6	2 40.9	2.35	23 2	2.3	7 17	2.2
	26	17 52 27	147	-18 31.8	+ 0.7	57.6	3 36.5	2.27	23 52	1.9	8 12	2.4
	27	18 49 48	140	-17 42.5	+ 3.3	56.7	4 29.7	2.17		-	9 11	2.5
	28	19 44 24	133	-15 56.6	+ 5.4	55.8	5 20.3	2.05	0 33	1.6	10 12	2.6
	29	20 36 17	127	-13 25.7	+ 7.1	55.2	6 8.1	1.94	18	1.4	11 14	2.6
	. 30	21 25 47	121	—10 20.8	+ 8.3	54.6	6 53.5	1.85	1 39	1.2	12 16	2.6
Ma	i ı	22 13 29	118	-651.8	+ 9.1	54.3	7 37.1	1.79	2 5	1.1	13 17	2.6
	2	23 0 4	116	<i>−</i> 3 7.4	+ 9.6	54.1	8 19.7	1.76	2 30	1.0	14 19	2.6

	Oh Welt-Zeit												
Tag	Scheinbare Rek <b>t</b> aszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	A er						
1940													
Mai 2	22 44 26 m a	- 4° 24.3° 2° 42' 5	54 9.2 20	14 46.8	340.898	+3.323	24.2						
3	22 20 2T 44 33	$- \circ 40.8 \frac{3}{3} \frac{43.5}{45.6}$	$54   5.3   \frac{3.9}{4.5}$	$14 \ 45.7 \ \frac{1.1}{1.3}$	352.694	+2.416	25.2						
4	0 14 17	+ 3 4.8 3 40.0	54 9.8 11.6	14 47.0 3.1	4.500	+1.406	26.2						
5	0 59 51 46 44	$+644.8\frac{340.0}{326.2}$	54 21.4	14 50.1 4.8	16.380	+0.330	27.2						
6	1 46 35 48 20	$+10 11.0 \frac{3}{3} \frac{20.2}{3.2}$	54 38.8 22.0	14 54.9 6.0	28.384	-0.770	28.2						
7	2 34 55 50 10	$+13 14.2 \frac{3}{2} \frac{3.2}{30.4}$	55 0.8 25.3	15 0.9 6.8	40.554	-1.848	29.2						
8	3 25 5 52 2	+15 44.6 <sub>1 48.0</sub>	55 26.1 27.6	15 7.7 7.6	52.920	-2.855	0.5						
9	4 17 7 53 40	+17 32.6 0 57.0	55 53.7 29.2	15 15.3 7.9	65.500	-3.740	1.5						
10	5 10 47 54 50	+18 29.6 0 0.2	56 22.9 30.4	15 23.2 8.3	78.304	-4.453	2.5						
11	6 5 37 55 25	+18 29.4 1 0.4	56 53.3 31.3	15 31.5 8.6	91.337	-4.949	3.5						
12	7 I 2 cc 26	+17 29.0 1 59.2	57 24.6 31.9	15 40.1 8.6	104.598	-5.191	4.5						
13	7 56 28 55 5	+15 29.8 2 52.9	57 56.5 31.7	15 48.7 8.7	118.085	-5.153	5.5						
14	8 51 33 54 39	+12 36.9 3 38.0	58 28.2 30.6	15 57.4 8.3	131.796	-4.824	6.5						
15	9 46 12 54 23	$+858.9\frac{330.0}{411.7}$	58 58.8 27.6	16 5.7 7.5	145.726	-4.209	7.5						
16	10 40 35 54 31	+ 4 47.2 4 21.7	59 20.4 22.3	16 13.2 6.1	159.862	-3.331	8.5						
17	11 35 6 55 7	+ 0 15.5 4 35.7	59 48.7 14.2	16 19.3	174.183	-2.235	9.5						
18	12 30 13 56 0	$-420.2_{422.5}$	60 2.9 3.7	16 23.2 1.0	188.649	-0.987	10.5						
19	13 26 22 57 24	$-842.7_{351.1}$	60 6.6 8.7	16 24.2 2.4	203.202	+0.330	11.5						
20	14 23 46 58 30	$-12\ 33.8$	59 57.9 21.4	16 21.8 5.8	217.762	+1.625	12.5						
21	15 22 16 50 5	$-15\ 37.2 \frac{3}{2} \frac{31}{2.8}$	59 36.5 33.0	16 16.0 9.0	232.234	+2.804	13.5						
22	16 21 21 58 46	-17 40.0 o 55.5	59 3.5 417	16 7.0 11.4	246.518	+3.790	14.5						
23	17 20 7 57 28	-18 35.5 o 11.5	58 21.8 46.9	15 55.6 12.8	260.525	+4.525	15.5						
24	18 17 35 55 22	-18 24.0 <sub>1 12.4</sub>	57 34.9 48.1	15 42.8	274.187	+4.980	16.5						
25	19 12 57 52 49	$-17  11.6_{2}  3.3$	56 46.8 45.4	15 29.8 12.4	287.467	+5.152	17.5						
26	20 5 46 50 16	-15 8.3 <sub>2 43.1</sub>	56 1.4 39.7	15 17.4 10.8	300.363	+5.053	18.5						
27	20 56 2 48 1	$-12\ 25.2\ _{3\ 12.1}$	55 21.7 31.7	15 6.6 8.7	312.905	+4.713	19.5						
28	21 44 3 <sub>46 19</sub>	- 9 13.1 3 31.6	54 50.0 22.3	14 57.9 6.1	325.146	+4.162	20.5						
29	22 30 22 45 15	-541.5	54 27.7 12.1	14 51.8	337.159	+3.437	21.5						
30	23 15 37 44 54	$-158.6\frac{3}{3}\frac{45.9}{46.6}$	54 15.6 1.9	14 48.6 0.6	349.026	+2.571	22.5						
31	0 0 31 45 13	+ 1 48.0 3 43.3	54 13.7 7.8	14 48.0 2.2	0.834	+1.600	23.5						
Juni 1	0 45 44 46 12	+ 5 31.3 3 32.3	54 21.5 16.4	14 50.2	12.668	+0.560	24.5						
2	I 31 56 47 45	$+93.6_{312.9}$	54 37.9 23.6	14 54.6 6.4	24.609	-0.513	25.5						
3	2 19 41 49 43	+12 16.5 2 44.0	55 1.5 28.9	15 1.0 7.9	36.726	-1.576	26.5						
4	3 9 24 51 51	+15 0.5 2 5.0	55 30.4 32.2	15 8.9 8.8	49.073	-2.582	27.5						
5	4 1 15 53 53	+17 5.5	56 2.6	15 17.7 9.1	61.688	-3.482	28.5						
6	4 55 8 55 27	+18 21.4 0 18.7	56 36.1 33.5	15 26.8 9.0	74.585	-4.224	0.0						
7	5 50 35 56 18	+18 40.1 0 43.1	57 9.0 30.6	15 35.8 8.3	87.760	-4.758	1.0						
8	6 46 53 56 25	+17 57.0	57 39.6 27.4	15 44.1 7.5	101.189	-5.041	2.0						
9	7 43 18 55 54	+10 12.1	58 7.0 23.5	15 51.0	114.833	-5.044	3.0						
10	8 39 12 55 3	+13 30.5 3 28.9	58 30.5 19.4	15 58.0 5.3	128.648	-4.755	4.0						
II	9 34 15 4 16	+10 1.6	58 49.9 15.2	16 3.3 4.1	142.593	-4.184	5.0						
12	10 28 31	+ 5 57.5	59 5.1	16 7.4	156.631	-3.357	6.0						

	Obe	ere K	ulminat	ion in	Gre	enwich		o <sup>h</sup> Lär	ige, +	50° Bro	eite
Tag	AR.	Ände- rung für 1h westl. Länge	Dekl.	Ände- rung für 1h westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1h westl. Länge	Auf- gang	Ände- rung für 1h westl. Länge	Untergang	Ände- rung für 1h westl. Länge
1940						1			-		0100
Mai 2	23 0 4	116	$-3^{\circ}7.4$	+ 9.6	54.I	8 19.7	1.76	2 30	I.0	14 19	2.6
3	23 46 13	115	+ 0 44.2	+ 9.7	54.1	9 1.8	1.76	2 53	1.0	15 20	,2.6
4	0 32 40	117	+ 4 35.2	+ 9.5	54.2	9 44.2	1.78	3 17	1.0	16 22	2.6
5	I 20 3	120	+ 8 16.9	+ 8.9	54.5	10 27.5	1.83	3 41	1.1	17 24	2.6
6	2 8 56	124	+11 39.9	+ 7.9	54.8	11 12.3	1.90	4 8	1.2	18 27	2.6
7	2 59 44	130	+14 34.0	+ 6.5	55.2	11 59.0	1.99	4 38	1.3	19 29	2.6
8	3 52 36	135	+16 48.1	+ 4.6	55.7	12 47.8	2.08	5 12	1.6	20 30	2.5
9	4 47 27	139	+18 11.7	+ 2.3	56.2	13 38.6	2.15	5 53	1.8	21 28	2.3
10	5 43 51	142	+18 36.6	- 0.3	56.7	14 30.9	2.20	6 40	2.1	22 21	2.1
II	6 41 9	144	+17 57.6	- 3.0	57.2	15 24.1	2.23	7 36	2.4	23 8	1.9
12	7 38 41	144	+16 14.3	- 5.6	57.8	16 17.6	2.23	8 37	2.7	23 50	1.6
13	8 35 56	143	+13 31.1	- 7.9	58.3	17 10.7	2.20	9 44	2.9		-
14	9 32 42	141	+ 9 56.5	9.9	58.9	18 3.4	2.19	10 56	3.0	0 27	1.5
15	10 29 6	141	+ 5 42.5	-11.2	59.3	18 55.7	2.18	12 9	3.1	1 0	1.3
16	11 25 32	142	+ 1 3.8	-11.9	59.8	19 48.1	2.19	13 25	3.2	1 30	1.2
17	12 22 33	144	- 3 42.5	-11.8	60.0	20 41.0	2.23	14 42	3.2	2 0	1.2
18	13 20 39	147	<b>—</b> 8 17.4	-10.9	60.1	21 35.0	2.28	15 59	3.2	2 29	1.3
19	14 20 9	150	-12 20.7	9.2	60.0	22 30.4	2.34	17 16	3.2	3 I	1.4
20	15 20 56	153	-15 33.6	- 6.8	59.6	23 27.1	2.38	18 32	3.0	3 37	1.6
21					_		_	19 42	2.8	4 17	1.8
22	16 22 21	154	-17 41.5	- 3.9	59.0	0 24.4	2.39	20 46	2.5	5 3	2.1
23	17 23 25	151	-18 36.6	- o.8	58.3	1 21.4	2.35	21 41	2,1	5 56	2.3
24	18 22 57	146	-18 19.6	+ 2.1	57.5	2 16.8	2.27	22 28	1.8	6 54	2.5
25	19 20 3	139	—16 58.o	+ 4.6	56.7	3 9.8	2.15	23 7	1.5	7 56	2.6
26	20 14 19	132	-14 43.5	+ 6.5	55.9	4 0.0	2.03	23 40	1.3	8 59	2.6
27	21 5 47	125	—II 48.8	+ 7.9	55.2	4 47.4	1.93		-	10 2	2.6
28	21 54 52	120	- 8 25.6	+ 8.9	54.7	5 32.4	1.83	0 8	I.I	11 5	2.6
29	22 42 15	117	- 4 44.1	+ 9.5	54.4	6 15.7	1.78	0 33	1.0	12 7	2.6
30	23 28 40	115	- o 52.9	+ 9.7	54.2	6 58.1	1.76	0 57	1.0	13 9	2,6
31	0 14 54	116	+ 3 0.1	+ 9.6	54.3	7 40.3	1.76	I 20	1.0	14 10	2.6
Juni 1	I I 44	118	+ 6 47.1	+ 9.2	54.4	8 23.0	1.81	I 44	1.0	15 12	2.6
2	1 49 52	123	+10 19.6	+ 8.4	54.8	9 7.1	1.87	2 10	I.I	16 15	2.6
3	2 39 54	128	+13 28.1	+ 7.2	55.2	9 53.1	1.96	2 38	1.3	17 17	2.6
4	3 32 13	134	+16 1.6	+ 5.5	55.7	10 41.3	2.06	3 11	1.5	18 20	2.6
5	4 26 54	139	-+17 48.6	+ 3.3	56.3	11 31.9	2.15	3 49	1.7	19 20	2.4
6	5 23 39	144	+18 38.6	+ 0.8	56.9	12 24.6	2.23	4 34	2,1	20 16	2.2
7	6 21 45	146	+18 23.9	- 2.0	57.4	13 18.6	2.26	5 28	2.4	21 6	2.0
8	7 20 21	146	+17 2.1	- 4.8	57.9	14 13.1	2.27	6 28	2.7	21 51	1.7
9	8 18 36	145	+14 36.4	- 7.3	58.4	15 7.3	2.24	7 35	2.9	22 30	1.5
10	9 16 1	142	+11 15.7	- 9.3	58.7	16 0.6	2.20	8 46	3.0	23 4	1.4
11	10 12 29	140	+ 7 12.8	-10.8	59.0	16 53.0	2.17	9 59	3.1	23 35	1.3
12		139	+ 2 42.6	-11.6	59.2		2.15		3.1		-

		0	h Welt-Zei	t	-10		
Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1940							
Juni 12	10 28 31 m s 11 22 18 53 47 11 22 18 53 49	+ 5 57.5 4 25.3 + 1 32.2 4 31.6	59 5.1 10.9 59 16.0 6.1	16 7.4 3.0 16 10.4 1.7	156.631	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	6.0 7.0
14 15	12 10 7 54 23	- 2 59.4 - 7 21.8	59 22.1 0.7	16 12.1 0.1	184.883	-1.143	9.0
16 17	14 5 55 56 37 15 2 32 57 38	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	59 17.1 12.9 59 4.2 20.5	16 10.7 3.5 16 7.2 5.6	213.231 227.369	+1.352 $+2.507$	10.0
18 19	16 0 10 58 4 16 58 14 57 38	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	58 43.7 <sub>27.6</sub> 58 16.1 <sub>22.7</sub>	16 1.6 15 54.1 7.5 9.2	241.420 255.324	+3.500 +4.271	12.0
20 2I	17 55 5 <sup>2</sup> 56 16	-18 39.5 o 47.6	57 42.4 37.7 57 4.7 30.3	15 44.9 10.3	269.018 282.444	+4.783 +5.017	14.0
22 23	19 46 20 51 48 20 38 8 49 26	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	56 25.5 37.8 55 47.7 33.8	15 23.9 10.3 15 13.6 9.2	295.564 308.364	+4.979 +4.689	16.0 17.0
24 25	21 27 34 47 25	$-10\ 35.0\ 3\ 27.2$	55 13.9 <sub>27.5</sub> 54 46.4 <sub>19.3</sub>	15 4.4 7.5 14 56.9 5.2	320.853 333.071	+4.178 +3.483	18.0
26 27	23 0 56 45 8 23 46 4 45	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	54 27.I 9.8	14 51.7 2.7	345.074 356.939	$+2.645 \\ +1.699$	20.0
28 29	0 31 4 45 35 1 16 39 46 49	$\begin{array}{c} + 4 & 5.9 & 3 & 45.4 \\ + 4 & 5.9 & 3 & 36.7 \\ + 7 & 42.6 & 3 & 20.4 \end{array}$	54 17.6 10.6 54 28.2 20.4	14 49.1 2.9 14 52.0 5.5	8.751 20.599	+0.684 -0.363	22.0
Juli 1	2 3 28 48 37	$+11  3.0  {}^{2}  55.5 $ $+13  58.5  {}^{2}  21.3 $	54 48.6 29.0 55 17.6 35.8	14 57.5 7.9 15 5.4 9.8	32.574 44.760	-1.404 -2.399	24.0 25.0
2	3 42 55 53 9	+16  19.8  1  36.7  +17  56.5  942.5	55 53.4 40.3	15 15.2	57.228 70.028	-3.300 -4.059	26.0 27.0
4 5	4 30 4 55 16 5 31 20 56 48 6 28 8 57 31	+18 39.0	57 15.5 40.3 57 55.8 35.7	15 37.6 15 48.5 9.8	83.188 96.699	-4.624 -4.949	28.0
6	7 25 39 57 25	+16 56.3 2 25.6	58 31.5 <sub>28.6</sub>	15 58.3 7.8	110.523 124.594	-4.994 -4.740	0.5
8	9 19 44 55 41	$+14\ 30.7\ 3\ 18.9$ $+11\ 11.8\ 3\ 59.5$ $+7\ 12.3\ 4\ 24.5$	59 20.1 10.9	16 11.5 5-4	138.829	-4.191	2.5
9 10	10 15 25 54 46 11 10 11 54 14	+ 247.8 + 33.2	59 31.0 <b>2.2</b> 59 33.2 <b>5.2</b>	16 15.1	167.454	-3.375 $-2.346$	3·5 4·5
11	12 4 25 54 11 12 58 36 54 38	$-145.4_{425.8}$ $-611.2_{43.1}$	59 28.0 11.3 59 16.7 16.0	16 13.7 3.1 16 10.6 4.4	181.712	-1.173 +0.067	5·5 6·5
13 14	13 53 14 55 23 14 48 37 56 12	-10  14.3  3  26.6	59 0.7 19.7	16 0.2	209.932 223.866	$+1.294 \\ +2.432$	7·5 8·5
15 16	15 44 49 56 44	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	58 18.1 25.6	15 54.6 7.0 15 47.6 7.6	237.669 251.329		9.5
17	17 38 14 55 53	$-18\ 37.5$ 0 24.4	57 24.4 30.1	15 40.0 8.2	264.825	+4.721	11.5
18 19	18 34 7 54 24 19 28 31 52 25	$-18  ext{ 13.1} $ $-16  ext{ 50.8}  ext{ }  ext{ }  ext{ }  ext{ }  ext{ }  ext{ }  ext{ 22.3} $	56 54·3 31·3 56 23.0 31·3	15 31.8 8.5 15 23.3 8.6	278.130 291.215	+4.986 +4.983	12.5
20 21	20 20 56 50 17 21 11 13 48 18	$-14\ 39.0$ $-11\ 48.2$ $2\ 50.8$	55 51.7 29.7 55 22.0 26.5	15 14.7 8.1 15 6.6 7.2	304.059 316.651	+4.725 +4.239	14.5
22 23	21 59 31 46 40 22 46 11	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	54 55·5 <sub>21.6</sub> 54 33·9	14 59.4 5.9 14 53.5	328.997	+3.561 +2.729	16.5

	Obe	o <sup>h</sup> Lä	nge, +	- 50° Bro	eite						
Tag	AR.	Ände- rung für ih westl. Länge	Dekl.	Ände- rung für 1h westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1h westl. Länge	Auf- gang	Ände- rung für 1h westl. Länge	Unter- gang	Ände- rung für 1h westl. Länge
1940											
Juni 12	11 8 18 s	139	+ 2 42.6	-11.6	59.2	17 44.7	2.15	II 13	3.I	h m	m
13	12 3 59	140	— 1 58.6	-11.7	59.4	18 36.3	2.16	12 28	3.1	0 4	1.2
14	13 0 11	142	-633.7	-11.1	59.4	19 28.4	2.19	13 44	3.1	0 33	1.2
15	13 57 26	145	-10 45.5	<b>—</b> 9.8	59.3	20 21.6	2.25	14 59	3.I	1 3	1.3
16	14 56 2	148	-14 16.8	- 7.7	59.1	21 16.1	2.30	16 13	3.0	1 36	1.4
17	15 55 49	151	-1652.5	- 5.2	58.8	22 11.8	2.34	17 24	2.9	2 12	1.6
18	16 56 9	151	-18 21.6	- 2.2	58.3	23 8.0	2.34	18 31	2.6	2 55	1.9
19								19 30	2.3	3 43	2.2
20	17 56 I	148	-18 39.4	+ 0.7	57.7	0 3.8	2.30	20 20	1.9	4 38	2.4
21	18 54 22	143	-17 <b>48.8</b>	+ 3.4	57.1	0 58.0	2.21	21 3	1.7	5 38	2.6
22	19 50 23	137	<b>─15</b> 58.3	+ 5.7	56.4	1 50.0	2.11	21 39	1.4	6 42	2.7
23	20 43 43	130	-13 19.9	+ 7.4	55.7	2 39.2	2.00	22 10	1.2	7 46	2.7
24	21 34 28	124	—IO 6.6	+ 8.6	55.2	3 25.9	1.90	22 36	1.1	8 50	2.6
25	22 23 4	119	- 6 30.0	+ 9.4	54.7	4 10.5	1.82	23 1	1.0	9 53	2.6
26	23 10 11	117	- 2 40.5	+ 9.7	54.4	4 53.5	1.78	23 25	1.0	10 55	2.6
27	23 56 33	116	- I I3.5	+ 9.7	54.3	5 35.8	1.76	23 48	1.0	11 57	2.6
28	0 42 57	117	+ 5 4.0	+ 9.4	54.3	6 18.2	1.78		-	12 58	2.6
29	1 30 12	119	+ 8 43.3	+ 8.8	54.6	7 1.4	1.83	0 13	I.I	14 0	2.6
30	2 18 59	124	+12 2.0	+ 7.8	55.0	7 46.1	1.90	0 39	1.2	15 2	2.6
Juli 1	3 9 56	130	+14 53-3	+ 6.3	55.5	8 32.9	2.00	1 10	1.4	16 5	2.6
2	4 3 24	137	+17 3.4	+ 4.4	56.I	9 22.3	2.11	1 45	1.6	17 6	2.5
3	4 59 24	143	+18 21.8	+ 2.0	56.9	10 14.3	2,21	2 27	1.9	18 5	2.3
4	5 57 33	147	+18 38.1	- 0.7	57.6	11 8.3	2.28	3 17	2.3	18 59	2.1
5	6 57 0	149	+17 45.9	<b>— 3.6</b>	58.2	12 3.7	2.32	4 15	2.6	19 47	1.9
6	7 56 47	149	+15 44.8	<b>- 6.4</b>	58.8	12 59.3	2.31	5 21	2.8	20 29	1.7
7	8 56 r	147	+12 41.2	- 8.8	59.2	13 54.5	2.28	6 32	3.0	21 6	1.5
8	9 54 13	144	+ 8 47.8	-10.5	59.5	14 48.6	2.23	7 46	3.1	21 39	1.3
9	10 51 18	142	+ 4 21.2	-11.6	59.6	15 41.6	2.19	9 2	3.2	22 10	1.2
10	11 47 39	140	- o 20.8	-11.8	59.5	16 33.9	2.17	10 18	3.2	22 39	1.2
11	12 43 45	140	- 5 o.r	-11.3	59.3	17 25.9	2.17	11 33	3.1	23 8	1.3
12	13 40 12	142	- 9 19.5	-10.2	59.1	18 18.3	2.20	12 48	3.1	23 39	1.4
13	14 37 27	144	-13 3.0	- 8.4	58.8	19 11.4	2.23	14 2	3.0		
14	15 35 37	146	-15 56.9	<b>-</b> 6.0	58.4	20 5.5	2.27	15 13	2.9	0 14	1.5
15	16 34 27	147	-17 50.3	<b>—</b> 3.4	57.9	21 0.2	2.29	16 19	2.7	0 53	1.7
16	17 33 20	147	-18 36.7	— o.5	57.4	21 55.0	2.27	17 20	2.4	I 38	2.0
17	18 31 23	143	-18 15.7	+ 2.2	56.9	22 49.0	2.22	18 14	2.1	2 29	2.3
18	19 27 49	138	-16 52.2	+ 4.7	56.4	23 41.3	2.14	18 59	1.8	3 26	2.5
19		-		_	-		-	19 38	1.5	4 28	2.6
20	20 22 3	133	-14 35.7	+ 6.6	55.9	0 31.5	2.04	20 10	1.3	5 31	2.7
21	21 13 56	127	—II 37.8	+ 8.1	55.3	1 19.3	1.94	20 39	I.I	6 35	2.7
22	22 3 37	122	<b>- 8 10.9</b>	+ 9.1	54.9	2 4.9	1.86	21 5	1.0	7 39	2.6
23	22 51 34	118	<b>-</b> 4 26.0	+ 9.6	54.5	2 48.8	1.80	21 29	1.0	8 42	2.6

	Oh Welt-Zeit												
Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter						
1940	h m s	0 /	, ,	, ,	0	0	d						
Juli 23	22 46 11 45 33	- 4 52.2 ° ′	54 33.9 14.8	14 53.5 4.0	341.124	+2.729	17.5						
24	23 31 44	- I 6.5 2 46.2	54 19.1 6.6	14 49.5 1.8	353.074	+1.787	18.5						
25	0 16 48 45 12	+ 2 39.7 3 39.2	54 12.5 2.6	14 47.7 0.7	4.910	+0.773	19.5						
26	I 2 0 +5 59	+618.9325.2	54 15.1 12.6	14 48.4	16.705	-0.272	20.5						
27 28	1 47 59 <sub>47 22</sub>	+ 9 44.1 3 3.4	54 27.7 22.7	14 51.8 6.2	28.545 40.518	-1.311	21.5						
20	2 35 21 49 16	+12 47.5 2 33.4	54 50.4 32.3	14 58.0 8.8	40.510	-2.303	22.5						
29	3 24 37 51 31	+15 20.9 1 54.2	55 22.7 40.7	15 6.8	52.715	-3.210	23.5						
30	4 16 8 53 49	+17 15.1 1 5.5	56 3.4 46.9	15 17.9 12.8	65.217	-3.986	24.5						
3I	5 9 57 55 52	+18 20.6 0 8.1	56 50.3 50.1	15 30.7 13.6	78.093	-4.586	25.5						
Aug. 1	6 5 49 <sub>57 21</sub>	+18 28.7 0 55.4	57 40.4 49.3	15 44.3	91.385	-4.96o	26.5						
2	7 3 10 58 4 8 1 14 68	+17 33.3 2 0.1	58 29.7 44.4	15 57.8 12.1	105.100	-5.065 $-4.870$	27.5						
3	8 I I4 <sub>58 2</sub>	+15 33.2 <sub>3 0.1</sub>	59 14.1 35.2	16 9.9 9.6		-4.070	28.5						
4	8 59 16 57 26	+12 33.1 3 49.2	59 49.3 22.8	16 19.5 6.2	133.628	-4.365	0.2						
5	9 56 42 56 40	+ 8 43.9 4 22.8	60 12.1 8.8	16 25.7 2.4	148.260	-3.568	1.2						
6	10 53 22 55 59	+ 4 21.1 4 38.0	60 20.9	16 28.1	162.980	-2.527	2.2						
7	11 49 21 55 35	- 0 16.9 <sub>4 34.8</sub>	60 15.8 17.0	16 26.7 4.6	177.668	-1.319	3.2						
- 8	12 44 56 55 32	$-451.7_{414.2}$	59 58.8 26.1	16 22.1 7.2	192.226	-0.032	4.2						
9	13 40 28 55 47	-9  5.9  3  38.5	59 32.7 32.0	16 14.9 8.7	206.587	+1.242	5.2						
10	14 36 15 56 7	-12 44.4 <sub>2 50.9</sub>	59 0.7 34.9	16 6.2	220.711	+2.420	6.2						
11	15 32 22 56 18	-15 35·3 , <sub>54 8</sub>	58 25.8 35.6	15 56.7 9.7	234.586	+3.434	7.2						
12	16 28 40 56 4	-17 30.1 o 54.1	57 50.2 34.8	15 47.0 9.5	248.215	+4.233	8.2						
13	17 24 44 55 18	-18 24.2	57 15.4 33.2	15 37.5	261.608	+4.785	9.2						
14	18 20 2 54 0	-18 17.3 1 4.2	56 42.2 31.1	15 28.5 8.5	274.774	+5.073	10.2						
15	19 14 2 52 18	-17 13.1 <sub>1 54.9</sub>	56 11.1 28.8	15 20.0 7.8	287.724	+5.095	11.2						
16	20 6 20 50 25	$-15 18.2_{2 36.4}$	55 42.3 26.4	15 12.2 7.2	300.464	+4.862	12.2						
17	20 56 45 48 36	$-1241.8_{3}^{2}8.2$	55 15.9 23.4	15 5.0 6.4	312.999	+4.397	13.2						
18	21 45 21 47 3	$-933.6_{329.8}$	54 52.5 19.8	14 58.6	325.338	+3.731	14.2						
19	22 32 24 45 54	$-6\ 3.8\frac{3}{3}$ 41.9	54 32.7	14 53.2	337.494	+2.903	15.2						
20	23 18 18 45 14	$-221.9_{345.4}$	54 17.4 9.7	14 49.0 2.6	349.491	+1.953	16.2						
21	0 3 32 45 7	+ 1 23.5 3 40.7	54 7.7 3.1	14 46.4	1.365	+0.925	17.2						
22	0 48 39 45 33	+ 5 4.2 3 28.4	54 4.6 4.8	14 45.6	13.162	-0.139	18.2						
23	1 34 12 16 31	+ 8 32.6 2 88	54 9.4 13.6	14 46.9 3.7	24.942	-1.197	19.2						
24	2 20 43 47 58	+11 41.4	54 23.0	14 50.6 6.3		-2.211	20.2						
25	3 0 41	+14 22.9 2 62	54 46.1	14 50.9 8.9	48.737	-3.140	21.2						
26	3 58 28 51 51	+16 29.1	55 18.8 41.7	15 5.8 11.3	60.914	-3.944	22.2						
27	4 50 19 53 52	+17 51.7 o 30.9	56 0.5 49.5	15 17.1 13.5	73.388	-4.584	23.2						
28	5 44 11 55 39	+18 22.6	56 50.0	15 30.6 14.9	86.234	-5.016	24.2						
29	6 39 50 56 56	1/ 55.1 I 10.0	57 44.7 56.2	15 45.5 15.3	99.510		1						
30	7 36 46	+10 25.1 2 21 8	58 40.9 53.0	16 0.8	113.245	-5.094	26.2						
31	8 34 20 57 52	+13 53.3 3 27.6	59 33.9 44.5	16 15.3 12.1	127.429								
Sept. 1	9 32 10 57 44	+10 25.7	60 18.4 30.9	16 27.4 8.4	142.008								
2	10 30 2 37 44	+ 6 14.6	60 49.3	16 35.8	156.879	-2.954	29.2						

		Obe	re K	ulminat	ion in	Gre	enwich		o <sup>h</sup> Lär	ige, +	50° Bre	eite
T	ag	AR.	Ände- rung für 1h westl. Länge	Dekl.	Ände- rung für 1 <sup>h</sup> westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1h westl. Länge	Auf- gang	Ände- rung für 1h westl. Länge	Unter- gang	Ände- rung für 1b westl. Länge
10	)40			-								
Jul	i 23	22 5I 34	118	- 4° 26.0	+ 9.6	54.5	2 48.8	1.80	1 m	m 1.0	8 42 m	2.6
	24	23 38 22	116	- o 33.I	+ 9.7	54.3	3 31.5	1.77	21 52	1.0	9 44	2.6
	25	0 24 44	116	+ 3 19.0	+ 9.5	54.2	4 13.8	1.76	22 16	1.0	10 45	2.6
	26	I II 23	118	+ 7 2.6	+ 9.0	54.3	4 56.4	1.79	22 42	I.I	11 46	2.6
	27	1 59 1	121	+10 29.6	+ 8.2	54.5	5 40.0	1.85	23 10	1.3	12 48	2.6
	28	2 48 20	126	+13 31.8	+ 6.9	55.0	6 25.3	1.93	23 43	1.5	13 49	2.5
				ÜÜ					-3 -3			
	29	3 39 51	132	+15 59.7	+ 5.3	55.6	7 12.7	2.03	1		14 50	2.5
	30	4 33 55	138	+17 42.9	+ 3.2	56.3	8 2.7	2.13	0 20	1.7	15 50	2.4
A	31	5 30 30	144	$+18\ 30.7$	+ 0.7	57.1	8 55.2	2.23	16	2.1	16 46	2.2
Au		6 29 10	149	+18 13.9	— 2.I	58.0	9 49.7	2.31	2 0	2.4	17 37	2.0
	2	7 29 10	151	+16 47.3	- 5.1	58.8	10 45.7	2.34	3 2	2.7	18 23	1.8
	3	8 29 34	151	+14 12.4	<b>—</b> 7.8	59.5	11 42.0	2.34	4 11	3.0	19 3	1.6
	4	9 29 35	149	+10 37.7	-10.0	60.I	12 37.9	2.32	5 26	3.2	19 38	1.4
	5	10 28 48	147	+ 6 18.5	-11.5	60.3	13 33.0	2.28	6 43	3.2	20 II	1.3
	6	11 27 9	145	+ 1 34.3	-12.I	60.3	14 27.3	2.25	8 1	3.3	20 42	1.3
	7	12 24 55	144	- 3 14.2	-11.8	60.1	15 20.9	2.23	9 19	3.2	21 12	1.3
	8	13 22 30	144	- 7 47.0	-10.8	59.7	16 14.4	2.23	10 36	3.2	21 43	1.4
	9	14 20 16	145	-1146.3	— 9. <b>1</b>	59.2	17 8.1	2.25	11 51	3.1	22 17	1.5
	10	15 18 24	146	-14 57.8	- 6.8	58.6	18 2.2	2.26	13 4	2.9	22 55	1.7
	II	16 16 48	146	-17 10.8	- 4.2	58.0	18 56.5	2.26	14 12	2.7	23 38	1.9
	12	17 15 4	145	-18 19.2	- r.5	57.4	19 50.6	2.25	15 14	2.4		
	13	18 12 35	142	-18 21.7	+ 1.2	56.8	20 44.1	2.20	16 9	2.1	0 26	2.1
	14	19 8 43	138	-17 21.9	+ 3.7	56.2	21 36.1	2.13	16 56	1.8	1 21	2.4
	15	20 2 59	133	-15 27.1	+ 5.8	55.7	22 26.3	2.05	17 37	1.6	2 19	2.5
											2.07	
	16	20 55 11	128	-1247.3	+ 7.4	55.3	23 14.4	1.96	18 11	1.4	3 21	2.6
	17		T00	0 22 6	+ 8.6	-		1.88	18 41	1.2	4 24	2.6
		21 45 23	123	- 9 33.6		54.9	0 0.5	1.83	,	1.1	5 27 6 30	2.6
	19	22 33 51	119	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	+ 9.3	54.5	0 45.0 I 28.I	1.78	19 33	1.0		2.6
	21		117		+ 9.7	54.3	2 10.6		19 57	1.0	7 3 <sup>2</sup> 8 34	2.6
	1	0 7 38	110	+ 1 43.8	+ 9.6	54.1	2 10.0	1.77		1.0	8 34	2.0
	22	0 54 6	117	+ 5 30.0	+ 9.2	54.1	2 53.0	1.78	20 46	I.I	9 35	2.5
	23	1416	119	+ 9 2.4	+ 8.4	54.2	3 36.0	1.81	21 13	1.2	10 36	2.5
	24	2 29 15	122	+12 12.8	+ 7-4	54.4	4 20.1	1.87	21 43	1.4	11 37	2.5
	25	3 19 5	127	+14 52.9	+ 5.9	54.9	5 5.8	1.95	22 18	1.6	12 37	2.5
	26	4 11 1	133	+1653.7	+ 4.1	55.5	5 53.7	2.04	22 59	1.9	13 36	
	27	5 5 13	138	+18 5.9	+ 1.9	56.2	6 43.8	2.13	23 47	2.2	14 32	2.3
	28	6 и 38	144	+18 20.5	- 0.7	57.1	7 36.1	2.22		-	15 24	2.1
	29	6 59 53	147	+17 30.4	- 3.5	58.1	8 30.3	2.29	0 44	2.5	16 12	1.9
	30	7 59 22	150	+15 32.6	-6.3	59.0	9 25.7	2.32	1 48	2.8	16 55	1.7
	31	8 59 25	150	+12 29.9			10 21.6	2.33	3 0	3.1	17 33	1.5
Se	pt. 1	9 59 30	150	+ 8 32.0		1	11 17.6	2.33		3.2	18 7	1.4
	2	10 59 21	149			61.0	12 13.4	2.32		3.3	18 39	1.3

	real multi-	(	o Welt-Ze	it			
Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1940							
Sept. 2	10 30 2 m s	+ 6 14.6	60 49.3 13.9	16 35.8 3.8	156.879	-2.954	29.2
3	11 27 32 57 30 57 21	- I 37.0 4 37.6 4 44.1	61 3.2	$16\ 39.6\ \frac{3.8}{1.2}$	171.908	-1.735	0.8
4	12 24 53 57 22	$-3$ 7.1 $\frac{7}{4}$ $\frac{7}{200}$	60 58.8 4.4	16 38.4 5.8	186.946	-0.392	1.8
5	13 22 16 57 30	$-737.1\frac{435.5}{357.4}$	60 37.5 34.7	16 32.6	201.854	+0.968	2.8
6	14 19 46 57 36	-11 34.5 3 JOO	60 2.8 43.5	16 23.2	216.518	+2.244	3.8
7	15 17 22 57 27	$-14 44.5 \frac{3}{2} \frac{12.5}{12.5}$	59 19.3 47.6	16 11.3 13.0	230.864	+3.350	4.8
8	~6 ~	-16 57.0	E8 27 E	TE 58 2	244.856	+4.228	5.8
9	17 11 41 50 52	-18  7.3  1  10.3  -18  7.3  8.0  8.0	57 420 4/.0	TE 45 2 13.0	258.487	+4.842	6.8
10	18 7 27 55 40	—18 TF.2	56 58.7 40.8	TE 220	271.776	+5.179	7.8
II	TO T 40 34 13	$-17 \ 25.1 \ _{1} \ _{1} \ _{1}.6$	56 17.0	T5 2T.0	284.754	+5.241	8.8
12	10 54 1 32 21	$-15\ 43.5 \frac{1}{2} \frac{41.0}{24.2}$	55 42.5 30.0	15 12.2 8.1	297.460	+5.042	9.8
13	20 44 26 48 36	$-13  ext{ 19.3}  ext{ }  ext{2}  ext{ }  ext{24.2}  ext{2}$	55 12.5 24.6	15 4.1 6.7	309.931	+4.607	10.8
14	21 22 2	10 21.5	54 47.0	TA 57.A	322.203	+3.966	11.8
15	47	6 50 5	E4 28 4 19.5	TA 520	334.312	+3.153	12.8
16	22 6 6 45 58	=- 2 22 5	#4 TO 8 14.0	TA 48.T 3.9	346.289	+2.208	13.8
17	23 51 24 45 16	0 20 0 3 +3.4	F4 40 9.8	T4 45 4	358.167	+1.174	14.8
18	0 26 22 43	+ 1 22 3 41.4	53 50.3	TA AA.T	9.979	+0.093	15.8
19	T OT ES #3 20	7 220	1 54 02 0.9	T4 44.4	21.764	-0.991	16.8
	0	3 13./	/.4	1.9			778
20	2 8 9 47 19	+10 47.6 2 48.3	54 7.4 14.2 54 21.6 22.1	14 46.3 3.9	33.566	-2.034	17.8
2I 22	2 55 28 48 47	+13 35.9 2 15.1	22.1	14 50.2 6.0	45.437	$\begin{bmatrix} -2.997 \\ -3.839 \end{bmatrix}$	19.8
	3 44 15 50 25	+15 51.0 1 34.5 +17 25.5 0 46.9	54 43.7 30.5	14 56.2 8.3	57·434 69.625	-4.523	20.8
23 24	4 34 40 52 5 5 26 45 52 27	-178 704	55 14.2 38.9 55 53.1 16.8	15 4.5 10.6 15 15.1 12.8	82.077	-5.010	21.8
25	6 20 22 53 37	TQ = 6 0.0	56 20.0	15 27.0	94.859	-5.266	22.8
	54 51	1 4.0	33.3	*4.3			
26	7 15 13 55 46	+17 1.0 2 3.5	57 33.2 56.8	15 42.4	108.032	-5.258	23.8
27	8 10 59 56 23	+14 57·5 <sub>2 59·7</sub>	58 30.0 56.5	15 57.9 15.4	121.640	-4.961	24.8
28	9 7 22 56 47	+11 57.8 3 48.4	59 26.5 50.8	16 13.3 13.8	135.699	-4.362	25.8
29	10 4 9 57 9	+ 8 9.4 4 24.6	60 17.3 39.5	16 27.1 10.8	150.189	-3.471	26.8
Okt. 1	11 1 18 57 38 11 58 56 58 14	$\begin{array}{c} +344.8 \\ -058.7 \\ 441.8 \end{array}$	60 56.8 23.1 61 19.9 2.4	16 37.9 6.3 16 44.2 0.0	165.041 180.144	-2.328 $-1.003$	27.8 28.8
OKt. 1	30 14	4 41.0	3.4				
2	12 57 10 58 55	- 5 40.5 4 18.9	61 23.3 16.7	16 45.1 4.6	195.351	+0.401	0.5
3	13 56 5 59 26	- 9 59.4 <sub>3 36.3</sub>	61 6.6 34.2	10 40.5	210.502	+1.772	1.5
4	14 55 31 <sub>59 32</sub>	<del>-13 35.7 </del>	60 32.4 47.0	16 31.2	225.445	+3.003	2.5
5	15 55 3 <sub>59 1</sub>	10 14.0	59 45.4 54.3	16 18.4 14.8	240.061	_	3.5
6	T 57 43		58 51.1 56.1	10 3.0	254.271	+4.738	4.5
7	17 51 47 55 50	-18 15.8 ° 35.4	57 55.0 <sub>53.7</sub>	15 48.3 14.6	268.043	+5.168	5.5
8	18 47 37 <sub>53 32</sub>	-17 40.4 <sub>1 20.0</sub>	57 1.3 48.3	15 33.7	281.383		6.5
9	19 41 9 51 12	-10 10.4	56 13.0 41.2	15 20.5	294.327	-+5. <b>1</b> 61	7.5
10	20 32 21 49 3	$-13 55.4_{2502}$	55 31.8 33.2	15 9.3 9.0	306.929	+4.772	8.5
11	21 21 24 47 16	-11 5.2	54 58.6 25.4	15 0.3 7.0		+4.170	9.5
12	22 8 40 46 0	1 49.4 2 22 8	54 33.2 17.9	14 53.3		+3.391	10.5
13	22 54 40	-4 16.6	54 15.3	14 48.5	343.308	+2.473	11.5

Ta	40	AR.	Ände- rung für 1h		Ände-	l e	1	Ände-		X _ 2 _	i i	1 2 4
			westl. Länge	Dekl.	für 1h westl. Länge	Parallaxe	Zeit des Durch- gangs	rung für 1h westl. Länge	Auf- ga <b>n</b> g	Ände- rung für 1h westl. Länge	Unter- gang	Ände- rung für 1b westl. Länge
Sep	t. 2						2					
		10 59 21	149	+ 3 55.3	-12.1	61.0	12 13.4	2.32	5 35 m	3·3	18 39 m	I.3
	3	11 58 58	149	- o 59.2	-12.3	61.1	13 8.9	2.31	6 55	3.3	19 11	1.3
	4	12 58 31	149	- 5 48.4	-11.6	60.8	14 4.4	2.31	8 15	3.3	19 43	1.4
	5	13 58 11	149	-10 10.3	-10.1	60.3	14 59.9	2.32	9 34	3.2	20 17	1.5
	6	14 58 0	150	-13 46.6	<b>— 7.9</b>	59.6	15 55.7	2.32	10 50	3.1	20 55	1.7
	7	15 57 45	149	-r6 24.0	- 5.2	58.8	16 51.3	2.31	12 I	2.9	21 37	1.9
	8	16 57 I	147	-17 55.I	- 2.4	57.9	17 46.5	2.28	13 7	2.6	22 24	2.1
	9	17 55 12	144	-18 18.7	+ 0.4	57.I	18 40.6	2.22	14 5	2,2	23 17	2.3
	10	18 51 45	139	-17 38.5	+ 2.9	56.4	19 33.0	2.15	14 54	1.9		_
	II	19 46 16	134	-16 1.8	+ 5.1	55.8	20 23.5	2.06	15 37	1.6	0 14	2.5
	12	20 38 38	128	—13 38.o	+ 6.8	55.3	21 11.8	1.97	16 13	1.4	1 15	2.6
	13	21 28 59	124	-10 37.6	+ 8.r	54.8	21 58.0	1.89	16 44	1.2	2 17	2.6
			120	- 7 10.8	+ 9.0		22 42.6	1.83	17 12	1.1	2 10	2.6
	14	22 17 38 23 5 1	117	-327.8	+ 9.5	54.5 54.2	23 26.0	1.79	17 12 17 37	1.0	3 19	2.6
	16			3 27.0	. 9.3	54.2			18 I	1.0	5 24	2.6
	17	23 51 40	116	+ 0 22.2	+ 9.6	54.1	0 8.5	1.77	18 25	1.0	6 25	2.6
	18	0 38 8	116	+ 4 10.0	+ 9.3	54.0	0 50.9	1.77	18 50	I.I	7 26	2.5
	19	1 24 56	118	+ 7 47.1	+ 8.7	54.0	I 33.7	1.80	19 16	1.1	8 27	2.5
	20	2 12 36	121	+11 4.9	+ 7.7	54.1	2 17.3	1.84	19 45	1.3	9 28	2.5
	21	3 1 33	124	+13 55.0	+ 6.4	54.4	3 2.2	1.90	20 18	1.5	10 28	2.5
	22	3 52 9	129	+16 8.9	+ 4.7	54.8	3 48.7	1.98	20 56	1.7	11 26	2.5
	23	4 44 34	133	+17 38.4 +18 15.7	+ 2.7 + 0.4	55.4 56.1	4 37.0	2.05	21 40	2.0	12 23	2.4 2.I
	24	5 38 49	138			56.9	5 27.2 6 19.0	2.13	22 31	2.3	13 15	
	25	6 34 42	141	+17 54.3	- 2.2		6 19.0	2.19	23 31	2.0	14 3	1.9
	26	7 31 53	144	+16 30.1	- 4.8	57.8	7 12.1	2.23		_	14 47	1.7
	27	8 29 58	146	+14 2.9	<i>−</i> 7.4	58.8	8 6.1	2.26	0 37	2.9	15 26	1.6
	28	9 28 38	147	+10 37.2	<b>-</b> 9.7	59.8	9 0.7	2.29	1 49	3.1	16 I	1.4
	29	10 27 44	148	+ 6 23.5	-11.4	60.6	9 55.7	2.30	3 5	3.2	16 34	1.3
Olr+	30	11 27 18	150	+ 1 37.8	-12.3	61.2	10 51.2	2.32	4 24	3.3	17 6	1.3
Okt.	. 1	12 27 27	151	— 3 18.6	-12.3	61.4	11 47.2	2.35	5 45	3.4	17 38	1.4
	2	13 28 21	153	— 8 2.I	-11.2	61.3	12 44.0	2.38	7 6	3.4	18 12	1.5
	3	14 29 56	155	-12 9.1	- 9.2	60.8	13 41.5	2.40	8 26	3.3	18 49	1.6
	4	15 31 54	155	-15 20.4	<b>—</b> 6.6	60.1	14 39.4	2.41	9 43	3.1	19 30	1.8
	5	16 33 33	153	-17 23.5	-3.6	59.2	15 36.9	2.38	10 53	2.8	20 18	2.1
	6	17 34 4	149	-18 14.3	— o.6	58.2	16 33.3	2.31	11 56	2.4	21 10	2.3
	7	18 32 38	143	-1755.8	+ 2.1	57.3	17 27.8	2.22	12 50	2.1	22 7	2.5
	8	19 28 43	137	-16 36.1	+ 4.5	56.4	18 19.8	2.11	13 36	1.7	23 8	2.6
	9	20 22 12	130	-14 25.8	+ 6.3	55.7	19 9.2	2.01	14 14	1.5		_
	10	21 13 14	125	-11 36.1	+ 7.7	55.1	19 56.2	1.91	14 47	1.3	0 10	2.6
	11	22 2 14	120	- 8 <b>17.</b> 6	+ 8.7	54.6	20 41.1	1.84	15 16	1.1	1 12	2.6
	12	22 49 45	117	- 4 40 <b>.</b> 2	+ 9.3	54.3	21 24.6	1.79	15 42	1.0	2 14	2.6
	13	23 36 24	116	- o 52.7	+ 9.6	54.1	22 7.1	1.77	16 6	1.0	3 16	2.6

Tag		(	h Welt-Ze	it	Direct		
Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	B <b>r</b> eite	Alter
1940							
Okt. 13	22 54 40 m *	- 4 16.6 ° '	54 15.3	14 48.5	343.308	+2.473	11.5
14	22 30 55	- 0 25 2 3 41.4	C4 4 T	T4 45 4	355.161	+1.456	12.5
15	0.24 58 7	± 2 60 3 42.1	52 50 0	TI 440	6.963	-⊢0.381	13.5
16	1 10 18	+6.41.7 3 34.8	52 50 4	T 1 14 T	18.758	-0.708	14.5
17	1 56 23 47 11	+10 12 3 19.5	53 59.4 <sub>5.6</sub>   54 5.0 <sub>10.6</sub>	14 45.7 2.8	30.583	-1.769	15.5
18	2 43 34 48 31	$+12 \ 57.3 \ \frac{2}{2} \ \frac{56.1}{24.6}$	54 15.6 15.7	14 48.5	42.475	-2.758	16.5
19	3 32 5 49 58	-15 ar o	54 31.3 21.4	14 52.8 5.9	54.466	-3.633	17.5
20	4 22 3 51 22	+17 7.2	54 52.7 27.5	14 58.7 7.4	66.594	-4.355	18.5
21	5 13 25 52 33	+18  6.6  0.59.3  7.8	55 20.2 33.8	15 6.1 9.3	78.898	-4.887	19.5
22	6 5 58 53 26	+18 14.4 0 47.1	55 54.0 40.2	15 15.4	91.421	-5.198	20.5
23	6 59 24 54 0	$+17 27.3 \frac{047.3}{142.8}$	56 34.2 45.9	15 26.3	104.211	-5.260	21.5
24	7 53 24 54 23	+15 44.5 2 36.4	57 20.1 50.0	15 38.8 13.7	117.314	-5.054	22.5
25	8 47 47	+13 8.1	58 to.1 51.6	15 52.5	130.771	-4.570	23.5
26	9 42 29 55 7	+ 0 43.4 3 24./	59 1.7 49.1	16 6.5	144.613	-3.811	24.5
27	10 37 36 55 49	+ 5 39.5 + 30.6	59 50.8 41.8	16 19.9 11.4	158.846	-2.800	25.5
28	11 33 25 56 51	+ 1 8.9 4 40.6	60 32.6 29.2	16 31.3 7.9	173.445	-1.584	26.5
29	12 30 16 58 10	- 3 31.7 <sup>4 31.0</sup>	61 1.8 12.4	16 39.2 3.4	188.343	-0.239	27.5
30	13 28 26 59 31	-8 2.7 + 0.4	61 14.2 6.9	16 42.6	203.431	+1.139	28.5
31	14 27 57 60 34	$-12$ 3.1 $_{3}$ 10.6	61 7.3 25.7	16 40.7	218.568	+2.439	0.1
Nov. 1	15 28 31 60 52	$-15 13.7 _{2 6.8}$	60 41.6	16 33.7 11 2	233.595	-3.558	1.1
2	16 29 23 60 12	-17 20.5 0 56.4	60 0.2	16 22.4	248.363	+4.417	2.1
3	17 29 35 58 29	-18 16.9 0 12.7	59 8.1	16 8.2	262.754	+4.972	3.1
4	18 28 4 56 2	-18 4.2 <sub>1 14.2</sub>	58 10.9 57.0	15 52.7 15.6	276.697	+5.212	4.1
5	19 24 6 53 14	-16 50.0 <sup>1</sup> 14.2	57 13.9 52.8	15 37.1 14.3	290.168	+5.152	5.1
6	20 17 20 50 33	-14 45.1 <sub>2 43.9</sub>	56 21.1 45.6	15 22.8	303.187	+4.825	6.1
7	21 7 53 48 15	-12 1.2	55 35.5 36.8	15 10.3 10.0	315.807	+4.270	7.1
8	21 56 8 46 31	- 8 49.2 3 3c.5	54 58.7 27.3	15 0.3 7.4	328.098	+3.532	8.1
9	22 42 39 45 25	$-518.7_{340.7}$	54 31.4 17.9	14 52.9 4.9	340.144	+2.650	9.1
10	23 28 4 44 58 0 13 2 45 8	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	54 13.5 9.1	14 48.0 2.5	352.025	+1.666 +0.619	10.1
	45 0	3 38.3	54 4.4 1.3	14 45.5 0.4			
12	0 58 10 45 50	+ 5 43.5 3 25.8	54 3.1	14 45.1	15.599	-0.451	12.1
13	1 44 0 47 0	+ 9 9.3 3 5.1	54 8.6	14 46.6	27.422	-1.503	13.1
14	2 3I O 48 27	+12 14.4 2 36.1	54 19.8 15.8	14 49.7 4.3	39.336	-2.495	14.1
15 16	3 19 27 50 2	+14 50.5 1 58.5	54 35.6 19.7	14 54.0 5.4	51.377	-3.384	15.1 16.1
	4 9 29 51 30 5 9 59 52 30	+16 49.0 1 13.3 +18 2.3 2 21.0	54 55.3 23.1	14 59.4 6.3	63.571	-4.128 -4.689	
17	52 39	- 0 21.9	55 18.4 26.3	15 5.7 7.1			17.1
18	5 53 38 53 24	+18 24.2 0 33.0	55 44.7 29.5	15 12.8 8.1	88.486	-5.033	18.1
19	6 47 2 53 40	+17 51.2 1 28.5	56 14.2 32.7	15 20.9 8.9	101.231	-5.134	19.1
20	7 40 42 53 37	+16 22.7 2 21.3	56 46.9 35.6	15 29.8 9.7	114.186	-4.977	20.1
21	8 34 19 53 25	+14 1.4 3 8.3	57 22.5 38.1	15 39.5 10.4	127.367	<del>-4.556</del>	21.1
22	9 27 44 53 21	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	58 o.6 39.3 58 39.9	15 49.9 10.7 16 0.6	140.797	-3.879	22.1
23	10 21 5	1 7 5.0	58 39.9	10 0.0	154.497	-2.969	23.1

	Obe	ere K	Culminat	ion in	Gre	enwich		oh Läi	nge, +	50° Br	eite
Tag	AR.	Ände- rung für 1h westl. Länge	Dekl.	Ände- rung für 1h westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1h westl. Länge	Auf- gang	Ände- rung für 1h westl. Länge	Unter- gang	Ände- rung für 1h westi. Länge
1940							1		1		
Okt. 13	23 36 24	116	- ° 52.7	+ 9.6	54.1	22 7.I	m 1.77	16 6 m	I.O	3 16 m	2.6
14		116	+ 2 56.1	+ 9.4	54.0	22 49.5	1.77	16 30	1.0	4 17	2.5
15		117	+ 6 37.7	+ 9.0	54.0	23 32.1	1.79	16 54	1.0	5 19	2.6
16				_	_	-5 5-1-	-	17 20	1.1	6 20	2.5
17		120	+10 3.3	+ 8.1	54.1	0 15.5	1.83	17 48	1.2	7 21	2.5
18		123	+13 4.1	+ 6.9	54.3	I 0.I	1.89	18 19	1.4	8 22	2.5
19	3 35 43	127	÷15 31.1	+ 5.3	54.5	1 46.2	1.95	18 55	1.6	0 21	2.4
20	0 00 .0	131	+17 15.9	+ 3.4	54.9	2 33.9	2.02	19 37	1.9	10 18	2.3
21		135	+18 10.9	+ 1.2	55.4	3 23.I	2.08	20 26	2.2	11 11	2.1
22		138	+18 10.1	- I.3	56.0	4 13.5	2.12	21 21	2.4	12 0	1.9
23		140	+17 10.1	- 3.7	56.7	5 4.9	2.16	22 23	2.7	12 44	1.7
24		141	+15 10.6	- 6.2	57.5	5 56.9	2.17	23 30	2.9	13 23	1.6
25	9 3 18	142	+12 14.5	<b>— 8.4</b>	58.4	6 49.3	2.19		_	13 59	1.4
26		143	+ 8 28.9	-10.3	59.3	7 42.0	2.20	0 41	3.1	14 31	1.3
27	10 57 29	144	+ 4 4.9	-11.6	60.1	8 35.3	2.24	I 57	3.2	15 2	1.3
28		147	- 0 41.9	-12.2	60.8	9 29.5	2.28	3 15	3.3	15 33	1.3
29	12 55 21	151	- 5 31.7	-11.8	61.2	10 24.9	2.35	4 34	3.3	16 5	1.4
30	13 56 28	155	—10 I.6	-10.5	61.2	II 22.0	2.40	5 55	3.3	16 40	1.5
31	14 59 0	158	-1348.3	-8.3	60.9	12 20.4	2.46	7 14	3.2	17 20	1.8
Nov. 1	16 2 20	159	-1632.6	- 5.3	60.3	13 19.6	2.47	8 30	3.0	18 5	2.0
2	17 5 26	156	-18 2.7	<b>— 2.1</b>	59.5	14 18.6	2.43	9 39	2.7	18 56	2.3
3	18 7 3	151	-18 16.4	+ 1.0	58.5	15 16.1	2.35	10 40	2.3	19 53	2.5
4	19 6 9	144	<b>—17</b> 20.3	+ 3.6	57.5	16 11.1	2.23	11 31	1.9	20 55	2.6
5	20 2 13	136	-15 25.7	+ 5.8	56.6	17 3.1	2.10	12 13	1.6	21 58	2.7
6	20 55 13	129	-1246.2	+ 7.4	55.8	17 52.0	1.98	12 49	1.4	23 2	2.6
7	21 45 32	123	<b>-</b> 9 34.0	+ 8.5	55.1	18 38.3	1.88	13 19	1.2		
8	22 33 48	119	$-6  \circ .3$	+ 9.2	54.6	19 22.5	1.81	13 46	I.I	0 5	2.6
9	23 20 43	116	<b>—</b> 2 14.3	+ 9.6	54.3	20 5.4	1.77	14 11	1.0	1 7	2.6
10	0 7 2	116	+ 1 35.5	+ 9.5	54.1	20 47.6	1.76	14 35	1.0	2 9	2.6
11	0 53 26	117	+ 5 21.2	+ 9.2	54.0	21 30.0	1.78	14 58	1.0	3 10	2.6
12	I 40 34	119	+ 8 54.6	+ 8.5	54.1	22 13.0	1.82	15 23	1.1	4 11	2.6
13		123	+12 6.9	+ 7.5	54.3	22 57.3	1.88	15 50	1.2	5 13	2.5
14	3 18 53	127	+14 48.8	+ 6.0	54.6	23 43.2	1.95	16 21	1.3	6 14	2.5
15		-		_			_	16 55	1.6	7 14	2.5
16		131	+16 51.1	+ 4.I	54.9	0 30.8	2.02	17 35	1.8	8 13	2.4
17		135	+18 4.9	+ 2.0	55.3	I 20.I	2.08	18 22	2.1	9 8	2.2
18		138	+18 23.5	— o.4	55.8	2 10.6	2.12	19 15	2.3	9 59	2.0
19		139	+17 43.0	- 2.9	56.3	3 1.8	2.15	20 15	2.6	10 44	1.8
20	1 ' ' '	139	+16 3.3	- 5.4	56.9	3 53.3	2.15	21 20	2.8	11 25	1.6
21	1	138	+13 27.7	-7.6	57.5	4 44.8	2.14	22 28	2.9	12 0	1.4
22	1 - '	138	+10 3.2	<b>-</b> 9.4	58.2	5 36.0	2.13	23 40	3.0	12 33	1.3
23	10 35 28	139	+ 5 59.4	-to.8	58.8	6 27.1	2.14		-	13 3	1.2

		(	h Welt-Ze	it	m IV		
Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1940							
Nov. 23	10 21 5 m *	+ 7 5.8 0	58 39.9 28"2	16 0.6	154.497	-2.969	23.I
24	TT T4 42 33 3°	+ 2 50.4	50 18.1	16 11.0	168.481	-1.865	24.1
25	12 0 6 54 23	— I 40.I 4 3°.5	59 52.I <sub>26.2</sub>	16 20.2	182.750	-0.625	25.1
26	13 4 45 55 39	$-69.8^{429.7}_{411.0}$	60 18.3 14.6	16 27.4 7.2	197.279	+0.675	26.1
27	14 2 4 59 4	$-10\ 20.8\frac{4}{3}\frac{11.0}{333.6}$	60 32.9	16 31.3 0.1	212.009	+1.946	27.1
28	15 I 8 60 27	$-13 54.4 \frac{3}{2} \frac{33.8}{38.8}$	60 32.9 15.8	16 31.4 4.3	226.844	+3.092	28.1
29	76 7 0F	-T6 22.2	60 17 1	16 27.1 8.4	241.660	+4.025	29.1
30	10 1 35 60 59 17 2 34 60 20	-18 5.1 c 20.0	59 46.5 42.6	16 18.7 11.6	256.318	+4.680	0.6
Dez. I	18 2 54	$-18 \ 25.1 \ 0 \ 48.4$	59 3.9 50.2	16 7.1 13.7	270.689	+5.024	1.6
2	10 1 25 30 31	-T7 36.7	58 13.7 53.0	15 53.4 14.4	284.676	+5.054	2.6
3	19 57 19 52 58	$-15\ 49.2 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	57 20.7 51.4	15 39.0	298.224	+4.796	3.6
4	20 50 17 50 11	-13  15.4	56 29.3 46.0	15 25.0 12.6	311.324	+4.290	4.6
5	21 40 28	-TO 8.2	EE 42.2	T5 T2.4	324.008	+3.585	5.6
6	22 28 21 4/ 53	- 6 30.0 <sup>3 29.2</sup>	~~ ~ T	15 2.0	336.340	+2.729	6.6
7	40 13	-257.7	F4 26 F	TA 54.2	348.399	+1.768	7.6
8	22 50 50	$+ 047.6^{345.3}$	F4 T8 0	T4 40 2	0.278	+0.745	8.6
9	0 44 52	1 1 20 6 3 42.0	EA TO T	TA 47.T	12.068	-0.302	9.6
10	1 30 19 45 27	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	54 11.6 1.5	14 47.5	23.857	-1.334	10.6
11	2 76 48	-TT TE 0	E4 21 7	14 50.2	35.724	-2.313	11.6
12	2 4 46 4/ 50	±14 20	E4 20 0 1/.3	T4 540 4.7	47-734	-3.198	12.6
13	3 54 30 49 44	+16 168 2 13.0	FF T 8	15 T.T	59.935	-3.949	13.6
14	4 46 0	1 30.7	FF 28 4 20.0	0 . /.3	72.359	-4.526	14.6
15	5 20 A 33 T	+18 27 8 -	EE E7 2	TE 162 7.0	85.017	-4.891	15.6
16	6 22 10	+18 12.1	r6 26 7 -9.5	T5 24.3	97.906	-5.015	16.6
	34 33	1 13.3	29.3	7.9	111.008	-4.879	17.6
17 18	7 27 43 54 25 8 22 8 54 25	+16 58.8 2 8.7	56 56.0 28.2	15 32.2 7.7		-4.679	18.6
	53 55	+14 50.1 2 58.1	57 24.2 26.9	15 39.9 7.4	124.301	-3.825	19.6
19 20	53 21	+1152.0 $+813.8$ $38.2$	57 51.1 25.4 58 16.5 23.7	15 47·3 6.9 15 54·2 6.4	151.380	-2.947	20.6
21	10 9 24 <sub>52 58</sub>	+ 4 6.8 4 7.0	FR 40 0 43.1	15 54.2 6.4 16 0.6	165.145	-1.887	21.6
22	11 55 25 53 3	- 0 Th.2 4 23.1	TO T6	16 6.5 5.9	179.058	-0.704	22.6
	33 4-	4 -2	10.1	4.9			
23	12 49 7 54 53	- 4 4I.4 <sub>4 II.9</sub>	59 19.7 13.2	16 11.4 3.6	193.120	+0.534	23.6
24	13 44 0 56 27	$-853.3_{342.9}$	59 32.9 6.5	16 15.0 1.8	207.324	+1.751	24.6
25	14 40 27 58 7	-12 36.2 <sub>2 58.0</sub>	59 39.4 2.2	16 16.8 0.6	221.645	+2.865	25.6
26	15 38 34 59 23	-15 34.2 <sub>1 59.8</sub>	59 37.2 12.3	16 16.2	236.036	+3.802	26.6
27	10 37 57 59 49	-17 34.0 0 52.5	59 24.9 22.7	16 12.8 6.2 16 6.6 0 a	250.422 264.708	+4.495	27.6
28	17 37 46 59 8	$-18\ 26.5\ \frac{0.52.5}{0.16.7}$	59 2.2 32.1	0.7		+4.900	28.6
29	18 36 54 57 23	-18 9.8 <sub>1 21.1</sub>	58 30.1 39.3	15 57.9 10.7	278.794	+5.000	0.1
30	19 34 1/ 54 56	1 -10 40.7	57 50.8 43.4	15 47.2	292.591	+4.803	1.1
31	20 29 13 52 14	-14 33.5 <sub>2 56.3</sub>	57 7.4 44.0	15 35.3 11.9	306.036	+4.340	2.1
32	21 21 27	-II 37.2	56 23.4	15 23.4	319.098	+3.659	3.1

	Obe	ere K	Lulminat	ion in	Gre	enwich		o <sup>h</sup> Lär	ige, +	50° Bro	eite
Tag	AR.	Ände- rung für 1 <sup>h</sup> westl. Länge	Dekl.	Ände- rung für 1h westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1h westl. Länge	Auf- gang	Ände- rung für 1h westl. Länge	Unter- gang	Ände- rung für 1h westl. Länge
1940									m	h m	
Nov.23	10 35 28	139	+ 5 59.4	—10.8	58.8	6 27.1	2.14	_ h _ m		13 3	I.2
24	11 31 11	140	+ 1 28.9	-11.6	59.5	7 18.8	2.17	0 54	3.1	13 33	1.2
25	12 27 55	144	- 3 13.0	-11.7	60.0	8 11.4	2.23	2 9	3.2	14 2	1.3
26	13 26 16	148	— 7 48.I	-11.0	60.4	9 5.7	2.30	3 27	3.2	14 35	1.4
27	14 26 33	153	-11 55.7	<b>-</b> 9.4	60.6	10 1.9	2.38	4 45	3.2	15 10	1.6
28	15 28 42	157	-15 14.8	- 7.0	60.5	10 59.9	2.45	6 2	3. <b>I</b>	15 52	1.9
29	16 32 2	159	-17 28.0	<b>— 4.0</b>	60.1	11 59.2	2.48	7 15	2.9	16 39	2.1
30	17 35 20	157	-18 24.8	— o.7	59.4	12 58.4	2.44	8 22	2.6	17 35	2.4
Dez. I	18 37 9	152	-18 4.8	+ 2.3	58.6	13 56.1	2.35	9 19	2.2	18 35	2.6
2	19 36 21	144	-16 36.3	+ 4.9	57.7	14 51.2	2.23	10 7	1.8	19 40	2.7
3	20 32 20	136	-14 12.9	+ 6.9	56.8	15 43.1	2.10	10 47	1.5	20 45	2.7
4	21 25 7	128	-11 9.3	+ 8.3	55.9	16 31.8	1.97	II 20	1.3	21 51	2.7
5	22 15 10	122	- 7 39.0	+ 9.2	55.2	17 17.8	1.87	11 49	1.1	22 55	2.6
6	23 3 11	118	-353.4	+ 9.6	54.7	18 1.7	1.80	12 15	1.0	23 57	2.6
7	23 49 58	116	- o 1.7	+ 9.7	54.4	18 44.4	1.77	12 39	1.0		_
8	0 36 18	116	+ 3 48.0	+ 9.4	54.2	19 26.7	1.76	13 3	1.0	0 59	2.6
9	1 22 59	118	+ 7 28.3	+ 8.9	54.2	20 9.3	1.80	13 27	1.0	2 0	2.5
10	2 10 42	121	+10 51.1	+ 8.0	54.3	20 53.0	1.85	13 53	1.1	3 2	2.5
11	2 59 58	126	+13 47.9	+ 6.7	54.6	21 38.2	1.92	14 22	1.3	4 3	2.5
12	3 51 10	131	+16 9.2	+ 5.0	55.0	22 25.3	2.00	14 54	1.5	5 4	2.5
13	4 44 21	135	+17 45.4	+ 2.9	55.5	23 14.4	2.09	15 32	1.7	6 3	2.4
14		_		_	_		_	16 17	2.0	7 1	2.3
15	5 39 15	139	+18 27.8	+ 0.5	56.0	0 5.3	2.15	17 8	2.3	7 55	2.1
16	6 35 20	141	+18 10.3	— 2.o	56.5	0 57.3	2.18	18 6	2.6	8 43	1.9
17	7 31 53	141	+16 50.9	- 4.6	57.0	I 49.7	2.18	10 11	2.8	9 26	1.7
18	8 28 14	140	+14 32.3	- 6.9	57.5	2 42.0	2.17	20 19	2.9	10 4	1.5
19	9 24 0	139	+11 21.9	- 8.9	57.9	3 33.7	2.14	21 30	3.0	10 38	1.3
20	10 19 9	137	+ 7 30.2	-10.3	58.3	4 24.7	2.12	22 42	3.0	11 8	1.2
21	11 13 58	137	+ 3 10.1	-11.2	58.8	5 15.5	2.12	23 56	3.1	11 37	1.2
22	12 9 0	138	- I 24.I	-11.5	59.1	6 6.4	2.14		-	12 6	1.2
23	13 4 55	141	- 5 56.6	-11.1	59.4	6 58.2	2.19	1 10	3.1	12 36	1.3
24	14 2 18	146	-10 10.3	- 9.9	59.6	7 51.5	2.26	2 26	3.1	13 9	1.4
25	15 1 32	150	-1347.3	- 8.0	59.7	8 46.7	2.33	3 41	3.1	13 46	1.7
26	16 2 31	154	-16 30.4	- 5.5	59.6	9 43.6	2.40	4 54	2.9	14 29	1.9
27	17 4 37	156	-18 6.o	- 2.4	59.3	10 41.6	2.42	6 2	2.7	15 19	2.2
28	18 6 39	154	-18 26.9	+ 0.7	58.8	11 39.5	2.39	7 4	2.4	16 16	2.5
29	19 7 18	149	-17 34.7	+ 3.6	58.2	12 36.0	2.31	7 57	2.0	17 18	2.7
30	20 5 31	142	-1538.5	+ 6.0	57.4	13 30.2	2.19	8 41	1.7	18 24	2.8
31	21 0 47	134	-12 52.1	+ 7.8	56.7	14 21.3	2.07	9 18	1.4	19 31	2.6

## Phasen des Mondes

1940		Welt-Zeit		1940	7	Velt-Zeit	
Jan.	•	h m	Letztes Viertel	Juli		11 28 m	Neumond
Jan.	2	4 56	Neumond	Jun	5		Erstes Viertel
	9	13 53 18 21	Erstes Viertel			6 35	Vollmond
	17		Vollmond		19	9 55	,
	24	23 22		A 22.00	27	11 29	Letztes Viertel
Ela las	31	14 47	Letztes Viertel	Aug.	3	20 9	Neumond
Febr.	8	7 45	Neumond		10	12 0	Erstes Viertel
	16	12 55	Erstes Viertel		17	23 2	Vollmond
3.50	23	9 55	Vollmond	~ .	26	3 33	Letztes Viertel
März	I	2 35	Letztes Viertel	Sept.	2	4 15	Neumond
	9	2 23	Neumond		8	19 32	Erstes Viertel
	17	3 25	Erstes Viertel		16	14 41	Vollmond
	23	19 33	Vollmond		24	17 47	Letztes Viertel
	30	16 20	Letztes Viertel	Okt.	I	12 41	Neumond
April	7	20 18	Neumond		8	6 18	Erstes Viertel
-	15	13 46	Erstes Viertel		16	8 15	Vollmond
	22	4 37	Vollmond		24	6 4	Letztes Viertel
	29	7 49	Letztes Viertel		30	22 3	Neumond
Mai	7	12 7	Neumond	Nov.	6	21 8	Erstes Viertel
	14	20 51	Erstes Viertel		15	2 23	Vollmond
	21	13 33	Vollmond		22	16 36	Letztes Viertel
	29	0 40	Letztes Viertel		29	8 42	Neumond
Juni	6	1 5	Neumond	Dez.	6	16 I	Erstes Viertel
	13	1 59	Erstes Viertel		14	19 38	Vollmond
	19	23 2	Vollmond		22	I 45	Letztes Viertel
	27	18 13	Letztes Viertel		28	20 56	Neumond
	-,	0				Jo	

Mond	lin	Erdnähe	Mond	in E	rdferne
194	.0	Welt-Zeit	1940		Welt-Zeit
Jan.	26	h	Jan.		h 12
Febr.	23	11 22	Febr.	14	2
März	23	10	März	9	5
April	20	19	April	5	9
Mai	18	19	Mai	2	23
Juni Juli	14	15	Mai Juni	30	17
Aug.	9	19	Juli	27 25	5
Sept.	3	3 6	Aug.	21	22
Okt.	I	16	Sept.	18	8
Okt.	30	4	Okt.	15	10
Nov.	27	12	Nov.	II	16
Dez.	25	6	Dez.	9	8

Oh Welt-Zeit		Obere Kul-
Scheinbare Scheinbare Rektaszension Deklination	$\log \Delta$	mination in Greenwich
$7 19 46.63 \frac{\text{m}}{6} 11.20 -22 43 15.9 \frac{1}{12} 16$	0.101 415	10 46.7
20 75 02 13 10.	0 105 840 4 423	10 49.0
0 13.34	0.110.016	10 51.3
0 19.20	3 938	10 53.7
44 55.16	0 117 662 3 /09	10 56.2
7 51 21.30 6 29.28 23 39 23.9 7 57.	0 121 152 3 409	10 58.7
7 57 50 58 -22 47 27 5	0.724.428	11 1.3
3 4 22 70 32.21 22 54 0 7	0 707 408 3 070	11 3.9
2 70 57 76 34.9/	0 120 260	11 6.6
7 2 - 2 - 3/.53	0.722.048	11 9.3
39.94	0.125 540	11 12.0
3 30 57.41 6 44.27 24 9 8.0 0 34.	0 727 840	11 14.8
2 60	0.120.080	11 17.6
0 40.24	0 141 027 193/	11 20.5
2 3.	0.142.524	11 23.3
3 241	0 145 242	11 26.2
4 55 00 51.33	0.146.701	II 29.2
11 40.86	0.148.082	11 32.1
18 42 08 -22 45 25	0.140.207	
25 20 22 33.37 22 26 64	0 150 170	11 35.1
20 25 50	4	11 41.1
20 22 27 57.49	0.151.608	11 44.1
16 21 67	0.152.082 4/3	11 47.2
52 20 80 39.22 22 45 56 7 14 43.	310	11 50.2
0 39.90	0 152 525	11 53.3
7 21.44 0.59 22 12 5.2	0.152 507	11 56.4
T4 22 58 1.14 27 52 55 7 9.	0 7 7 0 006	11 59.5
21 34.18 21 32 16.2	0.151 028	12 2.6
28 26 15 1.9/	0.151 267	12 5.7
35 38.40 20.46 26.2 23 40.	0.150 617	12 8.8
42 40 85	0 140 672	12 11.9
20 42.	1 140	12 15.0
56 45.02 2.53 TO 26 TO T	0.147.166	12 18.1
2 48 22 2.41 18 56 24 5	0 145 587 13/9	12 21.2
TO FO 10		12 24.3
17 52.27 7 1.25 17 52 33·3 34 15.8	O TAT 704	12 27.4
7 . 3	0.130.415	12 30.5
21 54 07 7533 1 16 42 22 0 33 11.	0 T20 X20	12 33.5
38 53.71 6 58.40 16 5 20.5 38 38.5	1 0 T22 072	12 36.6
45 52 20 TE 26 4T 8	0.700 807	12 39.6
52 49.29 6 57.09 14 46 38.8 40 3.0	0 127 221	12 42.6
59 44.63 -14 5 14.1	0.123 494	12 45.6
52 49.29 6 55 2/	14 40 38.8 41 24.5	14 40 38.8 41 24.7 0.127 321 3 827

			Oh Welt-Zeit		Obere Kul-
Tag		Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
194	0				-
Febr.	10	21 59 44.63 m	-14 5 14.I <sub>42 42 6</sub>	0.123 494	12 45.6
2 001.	II	22 6 27 87 33.24	T2 22 20 5	0 110 207	12 48.5
	12	22 12 28 57	12 28 21.8 43 50.7	O TT4 727	12 51.4
	13	22 20 16.18 6 47.61 6 43.93	11 53 22.6 46 14.4	0.109 761 4 976	12 54.2
	14	22 27 0.11 6 39.56	11 7 8.2 47 13.0	0.104 356	12 57.0
	15	22 33 39.67 6 34.33	10 19 55.2 48 3.9	0.098 495 6 339	12 59.6
	16	00 10 11 00		0.092 156 6 843	13 2.2
	17	22 46 42.18 6 28.18 22 46 42.18 6 20.95	8 42 5.2	0.085 313 7 368	13 4.7
	18	22 53 3.13 6 12.45	7 53 47.6 49 1/./	0.077 945 7 913	13 7.0
	19	22 59 15.58 6 2.61	7 4 10.1 49 37.5	0.070 032 8 477	13 9.2
	20	23 5 18.19 5 51.22	6 14 26.4 49 35.1	0.061 555 9 051	13 11.2
	21	23 11 9.41 5 38.17	5 24 51.3 49 9.6	0.052 504 9 633	13 13.0
	22	23 16 47.58		0.042.871	13 14.6
	23	22 22 10 80 3 43.31	2 47 157	0 022 657	13 15.9
	24	5 0.55	2 50 52 7 7/ 23.0	0.001 870	13 16.9
	25	22 22 5 22 4 4/./6	2 12 52.5	0.010 530 11 864	13 17.6
	26	22 36 32.20	T 20 20 6 TT -317	0.008.666	13 17.9
	27	23 40 36.37 4 4.17	0 47 32.9 39 37.3	9.986 318 12 778	13 17.8
	28	22 44 15 71	39 3/-3	0.050.540	13 17.2
	29	02 47 08 27	÷ 0.28 50.2	0.060.206	13 16.2
März	I	22 50 72 62	T 2 22.4	0.046.065 13 431	13 14.7
	2	22 52 27.OI	T 22 22 6	0.022.226	13 12.8
	3	22 54 10 20 1 43.29	T 58 22 0	0.010.610	13 10.3
	4	23 55 21.68 0 39.02	2 20 31.7 17 36.4	9.905 898 13 579	13 7.2
	5	23,76	+ 2 38 8.1	0.802.210	13 3.6
	6	22 56 7 28	13 1,2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12 59.5
	7	22 55 42 27	2 50 27 0	0.866.080	12 54.9
	8	22 54 46 40 33.7	2 2 56 4	0.852 687 12 393	12 49.8
	9	22 52 27 52	2 T 27.5	0.841.058	12 44.2
	10	22 55 20 25 31.4/	2 55 25 7	0 821 025	12 38.2
	11		. 33.9	0 907 000	
	12	23 49 14.96 23 46 39.23 2 52.31	2 20 56 14 53.0	0 972 002	12 31.9
	13	23 43 46.92	10 30.2	7 004	12 18.3
	14	22 40 42 20 3 4./2	2 11 15.4 <sub>22 20.5</sub> 1 48 54.9 <sub>25 20.1</sub>		12 11.2
	15	22 27 20 49 3 12./2	T 00 04 9	0.700.077	12 4.1
	16	22 24 12 22	0 40 1 -/ +3.7	00 T-J7	11 56.9
		3 15.42	-3 34.3	2 001	
	17	23 30 57.80 3 10.42	+ 0 26 14.2	9.785 077 1 606	11 49.8
	18	23 27 47-38 3 1.61	- 0 4 33.0 <sub>31 23.0</sub>	9.783 471 396	11 42.8
	19	23 24 45.77 2 49.43	0 35 56.0 31 24.0	9.783 075 751	11 35.9
	20	23 21 56.34 2 34.38	I 7 20.0 30 53.I	9.783 826	11 29.3
	21	23 19 21.96 2 17.00	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9.785 644 9.788 441 <sup>2</sup> 797	11 22.9
	22	23 17 4.96	- 2 8 7.0 J	1 9.700 441	1 11 10.9

			Oh Welt-Zeit		Obere Ku
Tag		Scheinbare Rektaszension	Scheinbare Deklination	log $\Delta$	mination in Greenwich
1949	)				77.1
März	22	23 17 4.96 m s	-2° 8′ 7.0 28′ 20″	9.788 441 2 678	11 16.0
2121112	23	22 15 7.15	2 26 27 1	0.702 110	II II.2
	24	22 12 20 82	2 2 22 2	0.706 570 4 400	11 5.8
	25	23 12 13.83	2 28 01 24 43.9	0 807 702 3 144	11 0.8
	26	23 11 19.55 0 22.48	2 50 42 5	0 807 157 3 /34	10 56.1
	27	22.40	4 10 54.2	0.812.688	10 51.8
			17 44.2		
	28	23 10 36.17 0 10.21	-4 28 38.4 <sub>15 13.0</sub>	9.820 334 6 986	10 47.8
	29	23 10 46.38 0 30.70	4 43 51.4 12 40.6	9.827 320 7 257	10 44.2
	30	23 11 17.08 0 50.42	4 56 32.0 10 8.5	9.834 577 7.467	10 40.0
	31	23 12 7.50	5 6 40.5 7 37.9	9.842 044 7 625	10 38.0
April	I	23 13 16.81 27.27	5 14 18.4 5 9.9	9.849 669	10 35.4
	2	23 14 44.08 1 44.34	5 19 28.3 2 45.0	9.857 407 7811	10 33.0
	3	23 16 28.42	5 22 I2 2	0.965.059	10 30.0
	4	22 18 28 02	5 22 27.2	0 8 7 0 60	10 20.1
	5	2 15.71	E 20 44 2 1 55.1	0 880 000	10 27.5
	6	23 20 44.03 2 30.08	5 Th 28 4 5.0	0 888 770	10 26.2
	7	22 25 58 22 43.01	F 70 040 0 14.4	9.896 596 7 760	
	8	23 28 54.64 2 8 30	F 2 F F 0 10.5		10 25.0
		23 20 54.04 3 8.29	5 2 5.5 10 18.4	9.904 365 7709	10 24.1
	9	23 32 2.93 3 19.58	-4 51 47.I 12 14.3	9.912 074 7 637	10 23.4
	10	23 35 22.51	4 39 32.8	9.919 711 7 556	10 22.9
	II	23 38 52.72 3 40.26	4 25 26.9 15 53.8	9.927 267 7 469	10 22.5
	12	23 42 32.98	4 9 33.1 17 37.8	9.934 736 7 378	10 22.3
	13	23 46 22.76 3 58.78	3 51 55.3 10 184	9.942 114 7 282	10 22.3
	14	23 50 21.54 4 7.38	3 32 36.9 20 55.5	9.949 396 7 183	10 22.4
	15	0	-2 TT 4T 4	9.956 579 7 082	10 22.6
	16	22 58 44 40 4 15.5/	2 40 12.2	0.060.667	10 23.0
	17	0 2 507 4 23.42	2 25 12.3 25 37.5	9.903 001 6 980	10 23.5
	18	0 7 28 87 4 30.90	T 50 44 0 25 2/·5	0.077.518	10 24.1
	19	0 12 17.12	)	0.084.200	10 24.9
	20	0 17 2.48 4 45.35	T 4 28 5	0.000.059	10 25.7
	- 1	4 52.70	-7 33·T	0 302	
	21	0 21 54.74 4 59.02	-0 35 5.1 <sub>30 49.9</sub>	9.997 520 6 456	10 26.7
	22	0 26 53.76 5 5.69	$-0$ 4 15.2 $\frac{3}{3^2}$ 4.1	0.003 976 6 349	10 27.8
	23	0 31 59.45 5 12.20	$+0\ 27\ 48.9\ _{33\ 15.5}$	0.010 325 6 241	10 29.0
	24	0 37 11.74 5 18.85	I I 4.4 34 24.7	0.016 566 6 121	10 30.3
	25	0 42 30.59 5 25.40	1 35 29.1	0.022 097 6021	10 31.7
	26	o 47 55.99 5 31.99	2 11 0.4 36 35.2	0.028 718 5 907	10 33.2
	27	5 5 5 5 5	+2 17 25.6	0.034 625	10 34.9
	28	0.50 661	2 27 72 7 30.9	0.040.416 3 /91	10 36.6
	29	1 4 51 05 3 45.34	1 2 18 1 35 33.9	0.046.087	10 38.5
	30	T TO 44 TO	1 12 20 6 39 32.2	6-6 5 549	10 40.5
Mai	30	7 76 42 27	F 22 46 6	0055056 3420	10 42.6
LUL	2	1 10 43.27 6 6.27	4/	0.057 050 5 286	10 44.8
	2	1 42 49.54	+6 5 3.3	4	

	Oh Welt-Zeit			Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940	h m s			h m
Mai 2	1 22 49.54 6 13.58	+ 6 5 3.3 42 4.5	0.062 342 5 147	10 44.8
3	I 29 3.12 6 21.10	6 47 7.8	0.067 489 4 998	10 47.1
4	I 35 24.22 6 28.84	7 29 56.8 42 49.0	0.072 487 4 843	10 49.6
5	I 4I 53.06 6 26.82	8 13 27.0 44 7.4	0.077 330 4 676	10 52.2
6	1 48 29.89 6 45.05	8 57 34.4 44 40.6	0.082 006 4 408	10 55.0
7	I 55 14.94 6 53.54	9 42 15.0 45 9.3	0.086 504 4 309	10 57.8
8	2 2 8.48	+10 27 24.2	0.000.812	11 0.0
9	2 9 10.75 7 11.25	11 12 57.2 45 32.9	0.094 917 3 886	11 4.0
10	2 16 22 00 / 11.23	11 58 48.3 43 3***	0.008.802	II. 7.4
II	2 23 42.48 7 20.48	TO 44 FT 6 40 3.3	0.102.451	11 10.8
12	2 21 12 27	12 21 01	0 105 845 3 394	11 14.5
13	2 28 57 82 / 39.40	14 17 6.5 45 56.2	0.108 964 3 119	11 18.3
14	7 49.14	45 50.2	0.777.788	11 22.3
15	50.00	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 500	11 26.4
16	2 2 48 24	76 22 47 4 73 /1	0 776 461	11 30.7
17	2 TT 6 26	10 33 47.4 44 28.3 17 18 15.7 42 27.5	0.118.264	11 35.1
18	2 70 00 67	T8 T F2 2 T3 3/·3	0 110 682	11 39.7
19	3 28 0.66	18 44 28.1	0.120.602	11 44.4
	8 44.30	41 20,2	504	
20	3 36 53.96 8 51.85	+19 25 48.3 39 53.0	0.121 276 139	11 49.3
21	3 45 45.81 <sub>8 58.52</sub>	20 5 41.3 38 13.6	0.121 415 321	11 54-3
22	3 54 44.33 9 4.17	20 43 54.9 <sub>36 22.2</sub>	0.121 094 791	11 59.4
23	4 3 48.50 9 8.67	21 20 17.1 34 19.4	0.120 303 1 269	12 4.6
24	4 12 57.17 9 11.93	21 54 36.5 32 6.2 22 26 42.7 30 42.0	0.119 034 1 749 0.117 285 2 226	12 9.8
25	4 22 9.10 9 13.83	29 43.9	2 220	12 15.1
26	4 31 22.93 9 14.35	+22 56 26.6 27 13.9	0.115 059 2 697	12 20.5
27	4 40 37.28 9 13.44	23 23 40.5 24 37.8	0.112 362 3 155	12 25.8
28	4 49 50.72 9 11.12	23 48 18.3 21 57.4	0.109 207 3 600	12 31.1
29	4 59 1.84 9 7.47	24 10 15.7	0.105 607 4 026	12 36.3
30	5 8 9.31 9 2.50	24 29 30.1 16 30.4	0.101 581 4 430	12 41.4
31	5 17 11.81 8 56.34	24 46 0.5 13 47.0	0.097 151 4813	12 46.5
Juni 1	5 26 8.15	+24 50 47 5	0.092 338 5 170	12 51.5
2	5 34 57.23 8 49.08	25 10 53.3 8 27.7	0.087.168	12 56.3
3	5 43 38.04 8 31.67	25 10 21.0	0.081 663 5 815	13 1.0
4	5 52 9.71 8 21.75	25 25 15.2 2 25 7	0.075 848 6 101	13 5.5
5	6 0 31.46 8 11.16	25 28 40.9 1 3.0	0.069 747 6 366	13 9.8
6	6 8 42.62 7 59.98	25 29 43.9 1 13.1	0.063 381 6 609	13 14.0
7	6 76 42 62	±25 28 20 8		13 17.9
8	6 24 22 22 / 40,32	25 25 82 3 22.5	0.050 772 6 831 0.049 941 7 036	13 21.7
9	6 32 7.14 7 23.77	25 10 42 2		13 25.2
10		25 12 22 1	60 - /	13 28.6
II	6 46 41.93 6 58.01	25 2 74 8 9 0.3	0.028.280 / 394	13 31.7
	T 1 70 6 #X OT	25 3 14.0 10 49.1	0.020 739 7 550	0 0-1

93 inc		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940		9.		7.12
Juni 12	6 53 39.94 6 44.78	+24 52 25.7 12 22.8	0.020 739 7 692	13 34.6
13	7 0 24.72 6 31.36	24 40 2.9 13 49.3	0.013 047 7 823	13 37.3
14	7 6 56.08 6 17.75	24 26 13.6 15 8.9	0.005 224 7 047	13 39.7
15	7 13 13.83 6 3.99	24 11 4.7 16 21.5	9.997 283 8 050	13 42.0
16	7 19 17.82 5 50.09	23 54 43.2 17 27.5	9.989 233 00	13 44.0
17	7 25 7.91 5 36.01	23 37 15.7 18 26.5	9.981 085 8 237	13 45.7
18	7 30 43.92 5 21.80	+23 18 49.2 19 19.2	9.972 848 8 216	13 47.2
19	7 36 5.72 5 7.42	22 59 30.0 20 5.5	9.964 532 8 386	13 48.5
20	7 41 13.14 4 52.87	22 39 24.5 20 45 2	9.956 146 8 48	13 49.6
21	7 46 6.01 4 38.14	22 18 39.3 21 18.7	9.947 698 8 499	13 50.4
22	7 50 44.15 4 23.22	21 57 20.6 21 46.0	9.939 199 8 542	13 50.9
23	7 55 7.37 4 8.07	21 35 34.6 22 7.0	9.930 657 8 576	13 51.2
24	7 59 15.44 3 52.69	+21 13 27.6 22 21.8	9.922 081 8 597	13 51.3
25	8 3 8.13 3 37.04	20 51 5.8 22 30.4	9.913 484 9 608	13 51.1
26	8 6 45.17 3 21.13	20 28 35.4 22 32.8	9.904 876 8 606	13 50.6
27	8 10 6.30 3 4.91	20 6 2.6 22 29.0	9.896 270 8 590	13 49.8
28	8 13 11.21 2 48.39	19 43 33.6 22 18.8	9.887 680 8 558	13 48.8
29	8 15 59.60 2 31.55	19 21 14.8 22 2.3	9.879 122 8 508	13 47.5
30	8 18 31.15 2 14.36	+18 59 12.5 21 39.3	9.870 614 8 440	13 45.9
Juli 1	8 20 45.51	18 37 33.2	9.862 174 8 248	13 44.1
2	8 22 42.36 1 39.00	18 16 23.3 20 34.1	9.853 825 8 222	13 41.9
3	8 24 21.36 1 20.83	. 17 55 49.2 19 51.4	9.845 592 8 089	13 39.5
4	8 25 42.19 1 2.39 8 26 44.58	17 35 57.8 19 2.3	9.837 503 7 914	13 36.7
5	0 43.71	17 16 55.5 18 6.5	9.829 589 7 706	13 33.6
6	8 27 28.29 0 24.82	+16 58 49.0 17 4.1	9.821 883 7 460	13 30.2
7	8 27 53.11	16 41 44.9 15 55.2	9.814 423	13 26.5
8	8 27 58.96 0 13.14	16 25 49.7 14 40.1	9.807 252 6838	13 22.5
9	8 27 45.82 0 31.99	16 11 9.6 13 18.9	9.800 414 6 455	13 18.2
10	8 27 13.83 ° 50.58 8 26 23.25	15 57 50.7 11 51.8	9.793 959 6 021	13 13.6
II	3 3 1 8.69	15 45 58.9 10 19.7	9.787 938 5 531	13 8.6
12	8 25 14.56 1 26.13	+15 35 39.2 8 42.9	9.782 407 4 984	13 3.4
13	8 23 48.43 1 42.67	15 25 50.3 7 2.2	9.777 423 4 379	12 57.9
14	8 22 5.76	15 19 54.1 5 18.4	9.773 044 3 714	12 52.1
15	8 20 7.72 2 11.97	15 14 35.7 3 32.6	9.709 330 2 002	12 46.1
16	8 17 55.75 2 24.21	15 11 3.1 1 45.7	9.766 337 2 215	12 39.9
17	8 15 31.54 <sub>2 34.43</sub>	15 9 17.4 0 0.7	9.764 122 1 388	12 33.5
18	8 12 57.11	+15 9 18.1 1 45.8	9.762 734 517	12 26.9
19	8 10 14.08	15 11 3.9 3 28.0	9.762 217 392	12 20.2
20	8 / 20./5 2 50.76	15 14 31.9 5 6.2	9.762 609 1 329	12 13.5
21	8 4 35.99 2 50.73	15 19 38.1 6 38.9	9.763 938 2 283	12 6.7
22	8 1 45.20 2 47.80	15 26 17.0 8 5.4	9.766 221 3 244	12 0.0
23	7 58 57.46	+15 34 22.4	9.769 465	11 53.3

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940	4 2 2	AND		
Juli 23	7 58 57.46 m	+15 34 22.4	9.769 465 4 200	11 53.3
24	7 56 15.56 2 33.06	15 43 46.8 9 24.4	9.773 665 5 139	11 46.8
25	7 53 42.50 2 21.40	15 54 21.7 11 36.6	9.778 804 6 052	11 40.4
26	7 51 21.10 2 7.03	16 5 58.3 12 38.6	9.784 856 6 925	11 34.3
27	7 49 14.07 1 50.15	16 18 26.9	9.791 781 7 752	11 28.4
28	7 47 23.92 1 31.01	16 31 37.3 13 42.1	9.799 533 8 525	11 22.8
29	7 45 52.91 1 9.84	+16 45 10.4	9.808 058 9 236	11 17.5
30	7 44 43.07 0 46.94	16 50 22.6	9.817 294 9 882	11 12.6
31	7 43 56.13 0 22.54	17 13 36.1 14 13.5	9.827 176 10 461	11 8.0
Aug. 1	7 43 33.59 0 3.05	17 27 49.4	9.837 637 10 067	11 3.9
2	7 43 36.64 0 20.60	17 41 51.6	9.848 604 11 402	II 0.2
3	7 44 6.24 0 56.84	17 55 32.0 13 7.7	9.860 006 11 767	10 57.0
4	F 45 000	+18 8 20.7	9.871 773 12 062	10 54.2
5	7 45 3.00 1 24.53 7 46 27.61 1 52.50	T8 2T 20	9.883 835 12 285	10 51.9
6	7 48 20.11 2 20.52	18 32 33.6 10 24.2	9.896 120 12 111	10 50.1
7	7 50 40.63 2 48.40	18 42 57.8 9 7.7	9.908 564 12 536	10 48.7
8	7 53 29.03 3 15.98	18 52 5.5 7 40.3	9.921 100 12 565	10 47.7
9	7 56 45.01 3 43.06	18 59 45.8 6 1.8	9.933 665 12 532	10 47.3
10	8 0 28 07		0.046 107	10 47.2
II	8 4 37.55 4 35.07	10 10 0.2	9.958 636 12 289	10 47.6
12	8 9 12.62 4 59.64	19 12 13.4 0 3.6	9.970 925 12 082	10 48.5
13	8 14 12.26 5 23.04	19 12 17.0 2 15.3	9.983 007 11 823	10 49.7
14	8 19 35.30 5 45.08	19 10 1.7 4 42.5	9.994 830	10 51.3
15	8 25 20.38 6 5.56	19 5 19.2 7 17.0	0.006 342 11 156	10 53.3
16	8 31 25.94 6 24.35	+18 58 2.2 9 57.2	0.017 498 10 755	10 55.6
17	8 37 50.29 6 41.30	18 48 5.0 9 5/.2	0.028 253 10 315	10 58.2
18	8 44 31.59 6 56.30	18 35 23.3 15 28.5	0.038 568 9 842	11 1.1
19	8 51 27.89 7 0.26	18 19 54.8 18 15.7	0.048 410	II 4.2
20	8 58 37.15 7 20.15	18 1 39.1 21 1.5	0.057 750 8 816	11 7.5
21	9 5 57.30 7 28.94	17 40 37.6 23 43.7	0.066 566 8 277	11 10.9
22	0 12 26 24	+17 16 53.9 26 20.6	0.074 843 7 728	11 14.5
23	9 21 1.95 7 40.54	16 50 33.3 <sub>28 50.6</sub>	0.082 571 7 178	11 18.2
24	9 28 42.49 7 43.54	16 21 42.7 31 12.3	0.089 749 6 630	II 22.0
25	9 36 26.03 7 44.88	15 50 30.4 33 24.5	0.096 379 6 092	11 25.8
26	9 44 10.91 7 44.73	15 17 5.9 35 26.6	0.102 471 5 565	11 29.6
27	9 51 55.64 7 43.27	14 41 39.3 37 18.1	0.108 036 5 057	11 33.4
28	9 59 38.91 7 40.71	+14 4 21.2 38 58.7	0.113 093 4 568	11 37.2
29	10 7 19.62 7 37.23	13 25 22.5	0.117 661 4 101	11 40.9
30	10 14 56.85 7 32.07	12 44 54.0 41 47.8	0.121 762 3 656	11 44.6
31	10 22 29.82	12 3 6.2 42 57.2	0.125 418 3 236	11 48.2
Sept. 1	10 29 57.97 7 22.87	11 20 9.0 43 57.0	0.128 054 2 840	11 51.7
2	10 37 20.84	+10 36 12.0	0.131 494	11 55.1

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940		- A - W   A		
Sept. 2	10 37 20.84 m *	+10 36 12.0	0.131 494 2 465	11 55.1
3	TO 44 28 TA	0 5T 24.2	0.122.050	11 58.4
4	10 51 49.64 7 5.61	0 5 54.3	0.136 074 1 785	12 1.6
5	10 58 55.25 6 59.69	8 19 49.6 46 32.4	0 7 7 9 8 70 - /-3	12 4.7
6	11 5 54.94 6 53.78	7 22 17 2 40 32.4	0.137 859 1 475	12 7.7
7	11 12 48.72 6 47.97	6 46 23.6 46 53.6	0.140 519 912	12 10.6
8	11 19 36.69 6 42.30	+ 5 59 14.6	0.141 431 654	12 13.4
9	11 26 18.99 6 36.78	5 11 55.6 47 79.0	0.142 085 411	12 16.1
10	11 32 55.77 6 31.44	4 24 31.4 47 25.3	0.142 496 183	12 18.8
II	11 39 27.21 6 26.30	3 37 6.1 47 22.3	0.142 679 36	12 21.3
12	11 45 53.51 6 21.36	2 49 43.8 47 15.6	0.142 643	12 23.8
13	11 52 14.87 6 16.64	2 2 28.2 47 5.9	0.142 401 439	12 26.1
14	11 58 31.51 6 12.15	+ 1 15 22.3 46 53.3	0.141 962 629	12 28.4
15	12 4 43.66 6 7.86	+ 0 28 29.0 46 37.9	0.141 333 810	12 30.7
16	12 10 51.52 6 3.80	- 0 18 8.9 46 20 0	0.140 523 986	12 32.8
17	12 16 55.32 5 59.96	I 4 28.9 46 0.0	0.139 537 1 156	12 34.9
18	12 22 55.28	I 50 28.9	0.138 381 1 321	12 36.9
19	12 28 51.58 5 52.84	2 36 6.8 45 37.9	0.137 060 1 484	12 38.9
20	12 34 44.42 5 49.58	- 3 21 20.6 <sub>44 48.1</sub>	0.135 576 1 642	12 40.8
21	12 40 34.00 5 46.49	4 6 8.7 44 20.5	0.133 934 1 799	12 42.7
22	12 46 20.49 5 43.57	4 50 29.2	0.132 135 1 954	12 44.5
23	12 52 4.06 5 40.78	5 34 20.6 43 20.8	0.130 181	12 46.2
24	12 57 44.84 5 38.17	6 17 41.4 42 48.6	0.128 073 2 262	12 48.0
25	13 3 23.01 5 35.67	7 0 30.0 42 15.2	0.125 811 2 415	12 49.6
26	13 8 58.68 5 33.27	$-74245.2_{4140.3}$	0.123 396 2 571	12 51.3
27	-13 14 31.95 5 30.98	8 24 25.5 41 4.0	0.120 825 2 728	12 52.9
28	13 20 2.93 5 28.78	9 5 29.5 40 26.3	0.118 097 2 885	12 54.4
29	13 25 31.71 5 26.64	9 45 55.8 39 47.3	0.115 212 3 046	12 55.9
30	13 30 58.35 5 24 54	10 25 43.1 39 7.1	0.112 166	12 57.4
Okt. 1	13 36 22.89 5 22.47	11 4 50.2 38 25.3	0.108 957 3 376	12 58.9
2	13 41 45.36 5 20.39	-11 43 15.5 <sub>37 42.0</sub>	0.105 581 3 547	13 0.3
3	13 47 5.75 5 18.31	12 20 57.5 36 57.3	0.102 034	13 1.7
4	13 52 24.06 5 16.17	12 57 54.8 36 11.1	0.098 313 3 901	13 3.0
5	13 57 40.23 5 13.98	13 34 5.9 35 23.4	0.094 412	13 4.3
6	14 2 54.21	14 9 29.3 34 33.9	0.090 326	13 5.6
7	14 8 5.88 5 9.24	14 44 3.2 33 42.8	0.086 051 4 471	13 6.8
8	14 13 15.12 5 6.65	$-15\ 17\ 46.0_{32\ 49.8}$	0.081 580 4 674	13 8.0
9	14 18 21.77 5 3.84	15 50 35.8 31 54.9	0.076 906 4 882	13 9.1
10	14 23 25.61	16 22 30.7 30 58.0	0.072 024 5 099	13 10.2
11	14 28 26.42	16 53 28.7 29 58.9	0.066 925 5 323	13 11.3
12	14 33 23.89 4 53.77	17 23 27.0 28 57 5	0.061 602	13 12.3
13	14 38 17.66	-17 52 25.1	0.056 048	13 13.2

		Oh Welt-Zeit			Obere Kul
Tag	5	Scheinbare Scheinbare Rektaszension Deklination		$\log \Delta$	mination in Greenwich
1940	0				-3/11
Okt.	13	14 38 17.66 m	-17 52 25.1 27 52.7	0.056 048	13 13.2
	14	14 43 7.35	TO 00 TO 0 2/ 53./	0.050 254 5 794	13 14.0
	15	14 47 52.48 4 45.13	18 47 5.9 26 47.1	0.044 211 6 299	13 14.8
	16	14 52 32.40	TO 12 42 6 25 3/-/	0.037 912 6 565	13 15.5
	17	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	TO 37 8.8 24 25.2	0.031 347 6 838	13 16.0
	18	15 1 34.58 4 20.54	20 0 18.1 23 9.3	0.024 509 7 119	13 16.5
	19	15 5 55.12	-20 22 7.8 <sub>20 26.1</sub>	0.017 390 7.400	13 16.8
	20	15 10 7.44 4 3.04	20 42 33.9 18 58.0	0.009 981 7 703	13 17.0
	21	15 14 10.48 3 52.58	21 1 31.9 17 24.0	0.002 278 8 003	13 17.0
	22	15 18 3.06 3 40.75	21 18 56.8 17 24.9	9.994 275 8 305	13 16.8
	23	15 21 43.81 3 27.42	21 34 43.4 11 3.2	9.985 970 8 608	13 16.5
	24	15 25 11.23 3 12.40	21 48 45.6 12 11.0	9.977 362 8 905	13 15.9
	25	15 28 23.63 2 55.52	-22 0 56.6 <sub>10 12.4</sub>	9.968 457 9 195	13 15.0
	26	15 31 19.15 2 36.59	22 11 9.0 8 5.5	9.959 262 9 468	13 13.8
	27	15 33 55.74 2 15 44	22 19 14.5 5 49.2	9.949 794 9 719	13 12.3
	28	15 30 11.18	22 25 3.7 2 22.7	9.940 075 9 937	13 10.4
	29	15 38 3.07 1 25.82	22 28 26.4 0 44.7	9.930 138 10 107	13 8.1
	30	15 39 28.89 0 57.15	22 29 11.1 2 5.5	9.920 031 10 215	13 5.3
	31	15 40 26.04 0 25.87	-22 27 5.6 5 9.I	9.909 816 10 245	13 2.0
Nov.	1	15 40 51.91 0 7.87	22 21 56.5 8 26.6	9.899 571	12 58.2
	2	15 40 44.04 0 43.80	22 13 29.9 11 57.6	9.889 398 9 974	12 53.8
	3	15 40 0.24	22 1 32.3 15 41.6	9.879 424 9 624	12 48.8
	4	15 38 38.83 1 59.95	21 45 50.7 19 36.1	9.869 800 9 094	12 43.2
	5	15 36 38.88 2 38.39	21 26 14.6 23 37.0	9.860 706 8 359	12 37.0
	6	15 34 0.49 3 15.42	-21  2  37.6  27  37.9	9.852 347 7 401	12 30.1
	7	15 30 45.07 2 40.42	20 34 59.7 31 30.0	9.844 946 6 206	12 22.7
	8	15 26 55.65 4 18.65	20 3 29.7 35 2.1	9.838 740 4 776	12 14.7
	9	15 22 37.00 4 41.37	19 28 27.6 38 0.9	9.833 964 3 133	12 6.2
	10	15 17 55.63 4 55.97	18 50 26.7 40 12.6	9.830 831 1 313	11 57-5
	II	15 12 59.66 5 1.29	18 10 14.1 41 24.9	9.829 518 623	11 48.7
	12	15 7 58.37 4 56.74	-17 28 49.2 41 28.5	9.830 141 2 607	11 39.8
	13	15 3 1.63 4 42.39	16 47 20.7 40 18.9	9.832 748 4 554	11 31.0
	14	14 58 19.24 4 19.02	16 7 1.8 37 57.6	9.837 302 6 389	11 14.6
	16	14 54 0.22 3 47.99	15 29 4.2 34 31.9	9.843 691 8 043	
	17	14 50 12.23 3 11.05 14 47 1.18 3 30.08	14 54 32.3 30 13.9 14 24 18.4 35 17.0	9.851 734 9 467 9.861 201 10 628	II 7.2
		2 30.00	25 1/.9	10 020	
	18	14 44 31.10 1 46.93	-13 59 0.5 19 59.3	9.871 829 11 521	10 54.3
	19	14 42 44.17	13 39 1.2 14 32.9	9.883 350 12 153	10 48.9
	20	14 41 40.92 0 20.39	13 24 28.3 9 11.0	9.895 503 12 542	10 44.3
	21	14 41 20.53 0 20.64	13 15 17.3 4 3.2	9.908 045 12 723	10 40.3
	22	14 41 41.17 0 59.15	13 II 14.I 0 43.2	9.920 768 12 724	10 37.0
	23	14 42 40.32	-I3 II 57.3	9.933 492	10 34.3

	Oh Welt-Zeit			Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940				
Nov. 23	14 42 40.32 m #	-13 11 57.3	9.933 492	10 34.3
24	14 44 15.05	70 77 5 4.4	0.046.074	10 32.2
25	TA 46 22.24	T2 25 50 2 5/-5	0.058 200 12 323	10 30.6
26	14 48 58.76	T2 28 21 5 12 22.3	0.070.282	10 29.5
27	T4 52 T 56 3 2.00	T2 52 40 7 13 19.2	0.00 - 060	10 28.8
28	14 55 27.79 3 26.23 14 55 27.79 3 47.05	13 53 40.7 <sub>17</sub> 49.6 14 11 30.3 <sub>19</sub> 55.4	9.993 100 10 666	10 28.4
29	14 59 14.84 4 5.49	-14 31 25.7 <sub>21 38.7</sub>	0.003 766 10 184	10 28.4
30	15 3 20.33 4 21.81	14 53 4.4 23 1.5	0.013 950 9 608	10 28.6
Dez. 1	15 7 42.14 4 26 26	15 16 5.9 24 6.0	0.023 648 9 217	10 29.2
2	15 12 18.40 4 49.05	15 40 11.9 24 54.5	0.032 865 8 744	10 30.0
3	15 17 7.45	16 5 6.4 25 28.5	0.041 609 8 286	10 30.9
4	15 22 7.87 5 10.51	16 30 34.9 25 49.8	0.049 895 7 842	10 32.0
5	15 27 18.38 5 19.54	-16 56 24.7 <sub>25 59.9</sub>	0.057 737 7 416	10 33.3
6	15 32 37.92 5 27.63	17 22 24.0	0.065 153	10 34.8
7	15 38 5.55 5 34.92	17 48 24.9 25 51.9	0.072 161 6 617	10 36.3
8	15 43 40.47 5 41.50	18 14 16.8 25 36.1	0.078 778 6 244	10 38.0
9	15 49 21.97 5 47.50	18 39 52.9 25 13.5	0.085 022	10 39.8
10	15 55 9.47 5 52.97	19 5 6.4 24 44.9	0.090 912 5 551	10 41.7
II	16 I 2.44 5 58.00	-19 29 51.3 <sub>24 11.1</sub>	0.096 463	10 43.7
12	16 7 0.44 6 2.65	19 54 2.4 23 32.6	0.101 692 4 921	10 45.8
13	16 13 3.09 6 6.96	20 17 35.0 22 49.9	0.106 613 4 629	10 47.9
14	16 19 10.05 6 10.98 16 25 21.03 6 11.77	20 40 24.9 22 3.4 21 2 28.3 21 12.6	0.111 242 4 350	10 50.1
16	-6 00 0 1+.//	27 22 47 0	0.115 592 4 082	10 52.4
	0 10.32	21 23 41.9 20 20.7	0.119 674 3 827	10 54.7
17	16 37 54.12 6 21.68	-21 44 2.6 <sub>19 25.0</sub>	0.123 501 3 583	10 57.1
18	16 44 15.80 6 24.87	22 3 27.6 18 26.8	0.127 084 3 348	10 59.6
19	16 50 40.67 6 27.90 16 57 8.57	22 21 54.4 17 26.1	0.130 432 3 122	11 2.1
20 21	77 2 20 26 6 30.79	22 39 20.5 16 23.3	0.133 554 2 904	11 4.6
22	17 3 39.36 6 33.56 17 10 12.92 6 26 10	22 55 43.8 <sub>15 18.5</sub>	0.136 458 2 695	11 7.2
	0 30.19	23 11 2.3 14 11.7	0.139 153 2 491	11 9.9
23	17 16 49.11 6 38.72	-23 25 14.0 <sub>13 3.2</sub>	0.141 644	11 12.6
24	17 23 27.83 6 41.14	23 38 17.2 11 52.9	0.143 938 2 103	11 15.3
25 26	17 30 8.97 6 43.45	23 50 10.1 10 41.1	0.146 041 1 916	11 10.0
27	17 30 52.42 6 45.66	24 0 51.2 24 10 18.9 8 12.0	0.147 957	11 23.7
28	17 43 38.08 6 47.77 17 50 25.85 6 49.77	24 79 27 9	0.149 691 1 556 0.151 247 1 280	11 25.7
29	~ ~ ~ ~ ~ ~ 6a	-24 25 28 2	0.152.627	11 29.5
30	-0	24 21 74 3 39.1	0.152 824	11 32.4
31	-0 - 0 53.50	24 25 27 5	1030	11 35.4
32	0 55.21	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.154 872 869	11 38.4

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940	4.12.1	04718776		4 6
Jan. o	20 39 42.28 m s	-20°11′51.9 ,′ "	0.150 8619 1 4654	14 6.3
I	20 44 48.10	10 52 51 2	0.149 3965 1 4801	14 7.4
2	20 40 52.55	10 22 168	0.147 9164 1 4949	14 8.6
3	20 54 55.62 5 1.69	19 13 9.3 20 39.8	0.146 4215 1 5100	14 9.7
4	20 59 57.31 5 0.30	18 52 29.5 21 11.2	0.144 9115 1 5254	14 10.7
5	21 4 57.61 4 58.90	18 31 18.3 21 42.1	0.143 3861 1 5409	14 11.8
6	21 0 56 51	-18 0 26 2	0.141 8452 1 5568	14 12.8
7	21 14 54.02 4 57.51	17 47 24.I 22 41.3	0.140 2884 1 5728	14 13.8
8	21 19 50.13 4 54.71	17 24 42.8 23 9.7	0.138 7156 1 5892	14 14.8
9	21 24 44.84 4 53.32	17 1 33.1 23 37.4	0.137 1264 1 6056	14 15.7
10	21 29 38.16	16 37 55.7 24 4.3	0.135 5208 1 6223	14 16.7
11	21 34 30.09 4 50.55	16 13 51.4 24 30.4	0.133 8985 1 6393	14 17.6
12	21 20 20.64	-15 49 21.0 <sub>24 55.6</sub>	0.132 2592 1 6563	14 18.5
13	21 44 9.83 4 47.82	15 24 25.4 25 20.1	0.130 6029 1 6726	14 19.3
14	21 48 57.65 4 46.48	14 59 5.3 <sub>25 43.8</sub>	0.128 9293 1 6911	14 20.2
15	21 53 44.13 4 45.15	14 33 21.5 26 6.6	0.127 2382 1 7087	14 21.0
16	21 58 29.28 4 43.83	14 7 14.9 26 28.6	0.125 5295 1 7264	14 21.8
17	22 3 13.11 4 42.54	13 40 46.3 26 49.9	0.123 8031 1 7444	14 22.6
18	22 7 55.65 4 41.26	-13 13 56.4 <sub>27 10.3</sub>	0.122 0587 1 7624	14 23.3
19	22 12 36.91 4 40.01	12 46 46.1 27 30.0	0.120 2963	14 24.1
20	22 17 16.92 4 38.79	12 19 16.1 27 48.8	0.118 5156 1 7990	14 24.8
21	22 21 55.71	11 51 27.3 28 6.9	0.116 7166	14 25.5
22	22 26 33.29 4 36.41	II 23 20.4 <sub>28 24.2</sub>	0.114 8991 1 8360	14 26.1
23	22 31 9.70 4 35.26	10 54 56.2 28 40.6	0.113 0631 1 8547	14 26.8
24	22 35 44.96 4 34.14	-10 26 15.6 <sub>28 56.4</sub>	0.111 2084 1.8724	14 27.4
25	22 40 19.10 4 33.05	9 57 19.2 29 11.3	0.109 3350 1 8023	14 28.0
26	22 44 52.15 4 32.01	9 28 7.9 20 25.5	0.107 4427	14 28.6
27	22 49 24.16 4 30.99	8 58 42.4 29 39.0	0.105 5312	14 29.2
28	22 53 55.15 4 20.02	8 29 3.4 29 51.7	0.103 0004	14 29.8
29	22 58 25.17 4 29.07	7 59 11.7 30 3.5	0.101 6501 1 9702	14 30.3
30	23 2 54.24 4 28.17	$-7298.2_{3014.8}$	0.099 6799 1 9903	14 30.9
31	23 7 22.41 4 27.31	6 58 53.4 20 25 7	0.097 6896 2 0107	14 31.4
Febr. 1	23 11 49.72	6 28 28.3 30 34.9	0.095 6789 2 0315	14 31.9
2	23 16 16.19	5 57 53.4 30 43.8	0.093 6474 2 0526	14 32.4
3	23 20 41.07 4 24 02	5 27 9.0 20 51.0	0.091 5948	14 32.9
4	23 25 6.79 4 24.19	4 56 17.7 30 59.4	0.089 5207 2 0959	14 33.3
5	23 29 30.98 4 23.51	- 4 25 18.3 <sub>31 6.0</sub>	0.087 4248 2 1181	14 33.8
6	23 33 54.49 4 22.86	3 54 12.3 31 11.9	0.085 3067 2 1407	14 34.2
7	23 38 17.35 4 22.24	3 23 0.4 31 17.1	0.083 1660 2 1635	14 34.6
8	23 42 39.59 4 21.66	2 51 43.3 21 21 6	0.081 0025 2.1860	14 35.1
9	23 47 1.25 4 21.11	2 20 21.7 21 25 2	0.078 8156	14 35-5
10	23 51 22.36	-14856.5	0.076 6051	14 35.9

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940		32 0 0 0 E1		3 2
Febr. 10	23 51 22.36 m s	$-14856.5_{3128.1}$	0.076 6051 2 2344	14 35.9
11	23 55 42.95 4 20.11	1 17 28.4 31 30.3	0.074 3707 2 2587	14 36.3
12	0 0 3.06 4 10.67	0 45 58.1 21 21 8	0.072 1120 2 2834	14 36.7
13	0 4 22.73 4 10.26	- 0 14 26.3 31 32.5	0.069 8286	14 37.1
14	0 8 41.99 4 18.87	+ 0 17 0.2	0.067 5204 2 2224	14 37.4
15	0 13 0.86 4 18.53	0 48 38.7 31 31.8	0.065 1870 2 3590	14 37.8
16	0 17 19.39 4 18.21	+ 1 20 10.5 31 30.3	0.062 8280 2.2848	14 38.2
17	0 21 37.60 4 17.92	I 5I 40.8 31 28.2	0.060 4432	14 38.5
18	0 25 55.52 4 17.67	2 23 9.0 31 25.2	0.058 0323 2 4372	14 38.9
19	0 30 13.19 4 17.46	2 54 34.2 31 21.7	0.055 5951 2 4638	14 39.2
20	0 34 30.65	3 25 55.9 31 17.3	0.053 1313 2.4006	14 39.6
21	2 38 47.91 4 17.11	3 57 13.2 31 12.3	0.050 6407 2 5177	14 39.9
22	0 43 5.02 4 16.99	$+$ 4 28 25.5 $_{31}$ 6.6	0.048 1230 2 5449	14 40.2
23	0 47 22.01 4 16.90	4 59 32.1 31 0.2	0.045 5781 2 5724	14 40.6
24	0 51 38.91 4 16.85	5 30 32.3 30 53.1	0.043 0057 2 6001	14 40.9
25	0 55 55.76 4 16.82	6 I 25.4 30 45.4	0.040 4056 2 6282	14 41.3
26	1 0 12.58 4 16.84	6 32 10.8 30 37.0	0.037 7774 2 6566	14 41.6
27	I 4 29.42 <sub>4 16.88</sub>	7 2 47.8 30 27.9	0.035 1208 2 6855	14 41.9
28	1 8 46.30 4 16.95	+ 7 33 15.7 30 18.1	0.032 4353 2 7148	14 42.3
29	I 13 3.25 4 17.06	8 3 33.8 30 7.6	0.029 7205 27444	14 42.6
März 1	1 17 20.31 4 17.19	8 33 41.4 29 56.6	0.020 9701 2 7747	14 43.0
2	1 21 37.50 4 17.35	9 3 38.0 29 44.7	0.024 2014 2 8055	14 43.3
3	1 25 54.05 4 17.53	9 33 22.7 29 32.2	0.021 3959 2 8267	14 43.7
4	1 30 12.38 4 17.74	10 2 54.9 29 19.1	0.018 5592 2 8685	14 44.0
5	1 34 30.12 4 17.96	+10 32 14.0 29 5.2	0.015 6907 2 9008	14 44.4
6	1 38 48.08 4 17.90	II I 19.2 <sub>28 50.8</sub>	0.012 7899 2 9337	14 44.7
7	1 43 6.28 4 18.47	11 30 10.0 28 35.6	0.009 8562 2 9671	14 45.1
8	I 47 24.75 4 18.74	11 58 45.6 28 19.7	0.006 8891	14 45.5
9	1 51 43.49	12 27 5.3 28 3.2	0.003 8880	14 45.8
10	1 56 2.52 4 19.32	12 55 8.5 27 46.0	0.000 8524 3 0706	14 46.2
11	2 0 21 84	T2 22 54 5	0.007.7878	14 46.6
12	2 4 41.48 4 19.64	13 50 22.7 27 0.7	9.994 6756 3 1062	14 47.0
13	2 9 1.42 4 20.25	14 17 32.4 26 50.5	9.991 5334 2 1788	14 47.4
14	2 13 21.07	14 44 22.9 26 20 6	9.988 3546 3 2160	14 47.8
15	2 17 42.24 4 20.89	15 10 53.5 26 10.2	9.985 1386 3 2537	14 48.2
16	2 22 3.13 4 21.21	15 37 3.7 25 49.1	9.981 8849 3 2919	14 48.6
17	2 26 24.24	+16 2 52.8 25 27.4	0.078 5020	14 49.0
18	2 30 45.85 4 21.51	16 28 20.2 25 5.0	9.975 2626 3 3304	14 49.4
19	2 35 7.66 4 22.11	16 53 25.2 24 42.0	9.971 8931 3 4089	14 49.8
20	2 39 29.77 4 22.39	17 18 7.2 24 18.5	9.968 4842 3 4488	14 50.3
21	2 43 52.16 4 22.65	17 42 25.7 22 54 2	9.965 0354 2 4880	14 50.7
22	2 48 14.81	+18 6 20.0	9.961 5465	14 51.1

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940	h m s			h m
März 22	2 48 14.81 m s 4 22.02	+18 6 20 0 23 29.5	9.961 5465 3 5296	14 51.1
23	2 52 37.73 4 23.16	18 29 49.5 23 4.2	9.958 0169 3 5707	14 51.6
24	2 57 0.89 4 23.38	18 52 53.7 22 28 2	9.954 4462 3 6121	14 52.0
25	3 1 24.27	19 15 32.0 22 12.0	9.950 8341 3 6541	14 52.5
26	3 5 47.86 4 23.78	19 37 44.0 21 45.0	9.947 1800 3 6066	14 52.9
27	3 10 11.64 4 23.96	19 59 29.0 21 17.5	9.943 4834 3 7396	14 53.4
28	3 14 35.60 4 24.10	+20 20 46.5 20 49.6	9.939 7438 3 7832	14 53.9
29	3 18 59.70 4 24.22	20 41 36.1 20 21.2	9.935 9606 3 8275	14 54-3
30	3 23 23.92 4 24.30	21 1 57.3 19 52.3	9.932 1331 3 8725	14 54.8
31	3 27 48.22 4 24.35	21 21 49.6 19 23.0	9.928 2606 3 9182	14 55.2
April 1	3 32 12.57 4 24.35	21 41 12.6 18 53.1	9.924 3424 3 9647	14 55-7
2	3 36 36.92 4 24.31	22 0 5.7 18 23.0	9.920 3777 4 0119	14 56.2
3	3 41 1.23 4 24.22	+22 18 28.7	9.916 3658 4 0600	14 56.6
4	3 45 25.45 4 24.09	22 36 21.0 17 21.4	9.912 3058 4 1089	14 57.1
5	3 49 49.54 4 23.89	22 53 42.4 16 50.0	9.908 1969	14 57.5
6	3 54 13.43 4 23.63	23 10 32.4 16 18 2	9.904 0384 4 2000	14 58.0
7	3 58 37.06 <sub>4 23.31</sub>	23 26 50.7 15 46.3	9.899 8294 4 2601	14 58.4
8	4 3 0.37 4 22.91	23 42 37.0 15 13.9	9.895 5693 4 3121	14 58.9
9	4 7 23.28 4 22.45	+23 57 50.9 14 41.4	9.891 2572 4 3647	14 59-3
10	4 11 45.73 4 21.89	24 12 32.3 11 85	9.886 8925	14 59.7
II	4 16 7.62 + 21.26	24 26 40.8	9.882 4742	15 0.2
12	4 20 28.88 4 20.55	24 40 10.2	9.878 0010	15 0.6
13	4 24 49.43 4 19.74	24 53 18.3 12 28.6	9.873 4739 4 5835	15 1.0
14	4 29 9.17 4 18.84	25 5 46.9 11 55.1	9.868 8904 4 6399	15 1.3
15	4 33 28.01 4 17.83	+25 17 42.0	9.864 2505 4 6971	15 1.7
16	4 37 45.84 4 16.73	25 29 3.3 10 47.5	9.859 5534 4 7549	15 2.0
17	4 42 2.57	25 39 50.8 10 13.7	9.854 7985 4 8132	15 2.4
18	4 46 18.09 4 14.20	25 50 4.5 9 39.7	9.849 9853 4 8720	15 2.7
19	4 50 32.29 4 12.77	25 59 44.2 9 5.8	9.845 1133 4 9311	15 2.9
20	4 54 45.06 4 11.22	26 8 50.0 8 31.9	9.840 1822 4 9909	15 3.2
21	4 58 56.28 4 9.57	+26 17 21.9 7 58.2	9.835 1913 5 0510	15 3.4
22	5 3 5.85 4 7.79	26 25 20.1 7 21.4	9.830 1403 5 1115	15 3.6
23	5 7 13.64 4 5.01	26 32 44.5 6 50.8	9.825 0288 5 1725	15 3.8
24	5 11 19.55 4 3.00	26 39 35.3 6 17.4	9.819 8563 5 2339	15 3.9
25	5 15 23.45 4 1.78	26 45 52.7 5 44.2	9.814 6224 5 2050	15 4.0
26	5 19 25.23 3 59.52	26 51 36.9 5 11.2	9.809 3265 5 3584	15 4.1
27	5 23 24.75 3 57.14	+26 56 48.1	9.803 9681 5 4215	15 4.1
28	5 27 21.89 3 54.62	27 1 26.6 4 6.0	9.798 5466 5 4852	15 4.1
29	5 31 16.51 3 51.97	27 5 32.6 3 33.9	9.793 0614 5 5495	15 4.0
30 Mai	5 35 8.48 3 49.16	27 9 6.5 3 2.2	9.787 5119 5 6142	15 3.9
Mai 1	5 38 57.64 3 46.21	27 12 8.7 2 30.9	9.781 8977 5 6793	15 3.8
2	5 42 43.85	+27 14 39.6	9.776 2184	15 3.6

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940	3			1200
Mai 2	5 42 43.85 m	+27 14 39.6	9.776 2184	15 3.6
3	5 46 26.07	27 16 20 5	9.770 2184 5 7450	15 3.3
4	3 39.05	27 18 8.9 0 59.5	9.764 6624 5 8774	15 3.0
5	3 30.42	27 19 8.4 0 30.0	9.758 7850 5 9140	15 2.6
6		27 19 38.4 0 1.0	9.752 8410	15 2.2
7	6 0 45.16 3 25.13	27 19 39.4 0 27.3	9.746 8303 6 0774	15 1.7
8	6 4 10.29 3 20.99	+27 19 12.1 ° 55.0	9.740 7529 6 1441	15 1.1
9		27 18 17.1	9.734 6088 6 2107	15 0.5
10	6 10 47.96 3 12.17	27 16 54.9 1 48.7	9.728 3981 6 2769	14 59.8
11	6 14 0.13 3 7.43	27 15 6.2 2 14.6	9.722 1212 6 3423	14 59.0
12	6 17 7.56 3 2.50	27 12 51.6 2 39.7	9.715 7789 6 4060	14 58.1
13	6 20 10.06 2 57.35	27 10 11.9 3 4.3	9.709 3720 6 4705	14 57.2
14	2 51.49	+27 7 7.6 3 28.1	9.702 9015 6 5328	14 56.1
15	0 25 59.40 2 46.40	27 3 39.5 3 51.2	9.090 3087 6 5022	14 55.0
16	2 40.50	26 59 48.3 4 13.5	9.089 7754 6.6516	14 53.8
17	2 14.53	26 55 34.8 4 35.2	9.683 1238 6 7073	14 52.5
18	5 36 20 35	26 50 59.6 4 56.2 26 46 3.4 7 36.2	9.676 4165 6 7604 9.669 6561 6 8102	14 51.0
19	1 /2	5 10.4	0 0103	14 49.5
20	2 14.90	+26 40 47.0 5 36.0	9.662 8458 6 8566	14 47.8
21	1 2 2 7.07	26 35 11.0 5 54.8	9.655 9892 6 8988	14 46.1
22	2 0.74	26 29 16.2 6 13.0 26 23 3.2 6 7 6	9.649 0904 6 9364 9.642 1540 6 9692	14 44.2
23 24	6 47 780	26 76 22 6 0 30.0	0 6-4-0 1- 0 9093	I4 42.2 I4 40.I
25	6 48 52 26 43.50	26 0 45 7	0.628 1880	14 37.8
	]	7 3.8	7 0181	
26	1 29.40	+26 2 41.3 7 19.3	0.621 1699 7 °33°	14 35.4
27 28		25 55 22.0 7 34.3 25 47 47.7 7 48 8	9.614 1369 7 0409	14 32.9 14 30.2
29	JO 01 1 12.29	25 20 580 / 40,0	0.600.0540	14 27.4
30	6 == 27.00	2 2 2 26 2	0.502.0222	14 24.4
31	- Ju.21	25 31 50.1 8 16.3 25 23 39.8 8 29.3	9.586 0078 6 9861	14 21.3
Juni 1	6 57 16 02	29.3	0 450 0075	14 18.0
2	33.22	( -0 6 0 41.9	0 9400	14 14.5
3	6 58 16.67 0 15.44	25 6 28.0 8 54.1 24 57 34.5 9 6.2	9.565 1802 6 8202	14 10.9
4	6 58 32.11 0 5.27	24 48 28.3 9 17.8	9.558 3499 6 7514	14 7.1
5	6 58 37.38	24 39 10.5 9 29.2	9.551 5985 66-70	14 3.2
6	6 58 32.33 0 15.48	24 29 41.3 9 40.5	9.544 9415 6 5465	13 59.1
7	6 58 16.85	+24 20 0.8 9 51.6	9.538 3950 6485	13 54.8
8	0 57 50.84 0 26 50	24 10 9.2	9.531 9705 62710	13 50.3
9	5/ 14.25 0 47.18	24 0 6.5 10 13.6	9.525 7040 6 1017	13 45.7
10	0 50 27.07	23 49 52.9	9.519 5989 5 9187	13 40.9
11	55 29.34 1 8.17	23 39 28.4 10 35.3	9.513 6802 5 7106	13 35.9
12	6 54 21.17	+23 28 53.1	9.507 9696	13 30.7

		Oh Welt-Zeit			Obere Kul-
Tag		Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
194	0				
Juni	12	6 54 21.17 m s	+23 28 53.1 10 46.0	9.507 9696	h m
ouni	13	1 10.44	22 18 71	0.502.4807.34/99	13 30.7
	14	6 FT 24 25	22 7 10.5	0.407.2625	13 19.9
	15	6 40 56.04	22 56 2.4	0 402 2142 4 9492	13 14.3
	16	6 .0 0 .0 4/.50	22 44 46 1 17.3	0.487 6652	13 8.5
	17	6 46 12.04	22 22 10 1	0 482 2205 4 343/	13 2.6
	1	2 4./1	~- J	3 7/ 7/	"
	18	6 44 7.30 2 12.40	+22 21 42.9 11 44.8	9.479 3598 3 6120	12 56.5
	19	6 41 54.90 2 19.36	22 9 58.1 11 52.4	9.475 7478 3 2245	12 50.3
	20	6 39 35.54 2 25.50	21 58 5.7 11 58.9	9.472 5233 2 8183	12 44.0
	21	6 37 10.04 2 30.78	21 46 6.8 12 3.9	9.469 7050 2 3955	12 37.6
	22	6 34 39.26 2 35.14	21 34 2.9 12 7.3	9.467 3095 1 9582	12 31.2
	23	6 32 4.12 2 38.54	21 21 55.6 12 9.0	9.465 3513 1 5095	12 24.6
	24	6 29 25.58 2 40.94	+21 9 46.6	9.463 8418	12 18.0
	25	6 26 44.64 2 42.30	20 57 38.2 12 5.6	9.462 7896 5888	12 11.4
	26	6 24 2.34 2 42.63	20 45 32.6 12 0.2	9.462 2008 1226	12 4.8
	27	6 21 19.71	20 33 32.4 11 52.3	9.462 0782 3438	11 58.2
	28	6 18 37.79 2 40.19	20 21 40.1 11 41.7	9.462 4220 8069	11 51.6
	29	6 15 57.60 2 37.48	20 9 58.4 11 28,1	9.463 2289 1 2633	11 45.0
	30	6 13 20.12 2 33.83	+19 58 30.3 11 11.6	9.464 4922	11 38.5
Juli	1	6 10 46.29 2 20.25	19 47 18.7 10 52.5	9.466 2028	11 32.1
	2	6 8 17.04 2 23.85	19 36 26.2 10 30.8	9.468 3494 2 5682	11 25.7
	3	6 5 53.19 2 17.69	19 25 55.4 10 6.5	9.470 9176 2 9733	11 19.5
	4	6 3 35.50 2 10.83	19 15 48.9	9.473 8909 3 3602	11 13.3
	5.	6 I 24.67 <sub>2 3.34</sub>	19 6 9.0 9 11.3	9.477 2511 3 7280	11 7.3
	6	5 59 21.33 1 55.30	+18 56 57.7 8 40.9	9.480 9791 4 0752	II I.4
	7	5 57 26.03 1 46.82	18 48 10.8 8 8.7	9.485 0543 4 4013	10 55.6
	8	5 55 39.21 1 37.94	18 40 8.1 7 35.2	9.489 4556	10 50.0
	9	5 54 1.27 1 28.71	18 32 32.9 7 0.7	9.494 1611 4 9876	10 44.5
	10	5 52 32.56 1 19.20	18 25 32.2 6 25.6	9.499 1487 5 2477	10 39.1
	11	5 51 13.36 1 9.51	18 19 6.6 5 50.1	9.504 3964 5 4864	10 33.9
	12	5 50 3.85 0 59.69	+18 13 16.5 5 14.5	9.509 8828 5 7037	10 28.9
	13	5 49 4.16	18 8 2.0 4 38.9	9.515 5865 5 8996	10 24.1
	14	5 40 14.39 0 39.79	18 3 23.1 4 3.7	9.521 4861 6 0752	10 19.4
	15	5 47 34.00 0 29.83	17 59 19.4 3 29.2	9.527 5614 6 2316	10 14.9
	16	5 47 4.77 o 10.01	17 55 50.2 2 55.4	9.533 7930 6 2680	10 10.5
	17	5 46 44.86 0 10.06	17 52 54.8 2 22.5	9.540 1619 6 4882	10 6.3
	18	5 46 34.80 0 0.32	+17 50 32.3 1 51.0	9.546 6501 6 5904	10 2.3
	19	5 46 34.48 0 9.27	17 48 41.3	9.553 2405 6 6768	9 58.4
	20	5 46 43.75 0 18.70	17 47 20.6	9.559 9173 6 7482	9 54.7
	21	5 47 2.45 ° 27.95	17 46 28.6 o 24.5	9.566 6655 6 8051	9 51.2
	22	5 47 30.40 0 36.99	17 46 4.1 0 1.2	9.573 4706 6 8490	9 47.8
	23	5 48 7.39	+17 46 5.3	9.580 3196	9 44.5

			Oh Welt-Zeit		Obere Kul-
Tag		Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940	,				
Juli	23	5 48 7.39 m # 82	+17 46 5.3 6 25 2	9.580 3196 6 8812	9 44.5
o un	24	= 48 F2 OT	17 46 20 5	0 787 2000	9 41.4
	25	F 40 47 62 54.41	17 47 180	0.504.5022	9 38.4
	26	E FO FO 40	17 48 26 2	( ( 9,33	9 35.6
	27	= = = = = = = = = = = = = = = = = = =	17 49 53.2	6	
	28		TH FT 27 2	1 ( 0 900)	
	20	1 20.42	1 39.0	0 8947	9 30.3
	29	5 54 46.48 <sub>1 33.83</sub>	+17 53 36.2 2 12.6	9.621 7347 6 8738	9 27.9
	30	5 56 20.31	17 55 48.8 2 24.2	9.628 6085 6.8460	9 25.5
	31	5 58 1.29 1 47.88	17 58 13.0 2 34.2	9.635 4554 6 8146	9 23.3
Aug.	1	5 59 49.17 1 54.55	18 0 47.2 2 42.3	9.642 2700 6 7774	9 21.2
	2	6 I 43.72 2 1.00	18 3 29.5 2 48.7	9.049 0474 6 7265	9 19.2
	3	6 3 44.72 2 7.23	18 6 18.2 2 53.6	9.655 7839 6 6918	9 17.3
	4	6 5 51.05	179 0 77 9		9 15.6
		2 13.22	-0 0 - 2 50,9	( ( ) ( ) ( )	9 13.9
	5	2 19.00	TS TE 72	0 655 5737	9 13.9
		6 10 -6 - 24.39	18 18 50 2 50.0	0.680.0545	9 12.3
	7 8	E TE TO 70	2 57.2	9.082 2545 6 4870	-
		6 15 18.73 2 35.17	2 54.3	9.688 7415 6 4311	9 9 9 4
	9	6 17 53.90 2 40.19	2 50.2	9.695 1726 6 3740	9 8.1
	10	6 20 34.09 2 45.04	+18 26 47.6 2 44.6	9.701 5466 6 3157	9 6.8
	II	6 23 19.13 2 49.74	18 29 32.2 2 37.5	9.707 8623 6 2567	9 5.7
	12	6 26 8.87 2 54.26	18 32 9.7 2 29.3	9.714 1190 6 1967	9 4.6
	13	6 29 3.13 2 58.63	18 34 39.0 2 19.8	9.720 3157 6 1359	9 3.6
	14	$6\ 32\ 1.76\frac{2\ 30.03}{3\ 2.86}$	T8 36 58.8	9.726 4516 6 0745	9 2.6
	15	6 35 4.62 3 6.94	T8 20 7.8	9.732 5261 6 0129	9 1.8
	16	6 38 11.56	. 3/:-	0 0129	9 1.0
		, 10.00	+18 41 4.9 1 44.1 18 42 49.0 1 20.0	9.738 5390 5 9507	1
	17 18	6 41 22.44 3 14.68		9.744 4897 5 8882	_
		6 44 37.12 3 18.34	18 44 18.9 1 14.8	9.750 3779 5 8255	8 59.5
	19	6 47 55.46 3 21.88	18 45 33.7 0 58.7	9.756 2034 5 7626	8 58.9
	20	6 51 17.34 3 25.28	18 46 32.4 0 41.6	9.761 9660 5 6999	8 58.4
	21	6 54 42.62 3 28.54	18 47 14.0 0 23.5	9.767 6659 5 6369	8 57.9
	22	6 58 11.16 3 31.69	+18 47 37.5 0 4.6	9.773 3028	8 57.4
	23	7 1 42.85 3 34.71	18 47 42.1 0 15.1	9.778 8769 5 5741	8 57.0
	24	5 5 TO 56 3 34./1	18 47 27.0 0 35.6	0.784.2885	8 56.7
	25	7 8 55 76 3 37.00	18 46 51.4 0 56.9	0 480 8040 3 4194	8 56.4
	26	מ דם מל לל	TQ 4" "4"	0.705 2252	8 56.1
	27	7 76 TR FO 3 TJ. T	T8 11 25 5	0.800 5500	8 55.9
		3 43.39		) ~~T°	
	28	7 20 4.18 3 48.03	+18 42 54.0	9.805 8155 5 2039	8 55.8
	29	7 23 52.21 3 50.35	18 40 49.3 2 28.6	9.811 0194 5 1434	8 55.6
	30	7 27 42.56 3 52.56	18 38 20.7 2 52.9	9.816 1628 5 0839	8 55.5
Q	31	7 31 35.12 3 54.68	18 35 27.8	9.821 2467 5 0251	8 55.5
Sept.	I	7 35 29.80 3 56.68	18 32 10.1	9.826 2718 4 9667	8 55.5
	2	7 39 26.48	+18 28 27.1	9.831 2385	8 55.5

		On Welt-Zeit			Obere Kul-
Tag		Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940	0				
Sept.	2	7 39 26.48 258.58	+18 28 27.1	9.831 2385	8 55.5
o o p c .	3	7 43 25.06	18 24 18.4	0 826 7470	8 55.5
	4	7 17 25 15	TS TO 42 4 4 35.0	0.841 0007	8 55.6
	5	7 51 27.56	T8 T4 4T 0 3 1.3	0.845 7080 4 79/3	8 55.7
	6	7 FF 2T 20 + 3./3	18 0 12.5 5 20.4	9.850 5405 4 7425	8 55.8
	7	7 59 36.57 4 5.28	18 3 17.8 5 55.7 18 3 17.8 6 23.1	9.855 2292 4 6359	8 56.0
	8	9 - 1		0.850.8651	8 56.2
	9	8 3 43.31 <sub>4 8.13</sub> 8 7 51.44 <sub>4 8.44</sub>	TH FO 20	0.864.4488 4 3037	8 56.4
	10	8 12 0 88 + 9.44	7 10.0	0.868.0812 + 5344	8 56.6
	II	8 76 77 76	T7 24 58 2 / 40.9	0.872 4620 4 4010	8 56.8
	12	8 20 22 42	TT 06 100	0.877.8050 44320	8 57.1
	13	8 24 26.40	17 17 50.4	0 882 2777 4 302/	8 57.4
		4 14.02	9	4 3341	] "
	14	8 28 50.42 4 15.01	+17 8 47.3 9 40.7	9.886 6118 4.2861	8 57.7
	15	8 33 5.43 4 15.93	16 59 6.6	9.890 8979 4 2388	8 58.0 8 58.3
	16	8 37 21.36 4 16.79	16 48 57.2 10 38.0 16 38 19.2 11 6.6	9.895 1367 4 1918	8 58.3 8 58.7
	17 18	8 41 38.15 4 17.60	16 27 12.6	9.899 3285 4 1454	
		8 45 55.75 <sub>4 18.34</sub> 8 50 14.09 4 10.01	16 15 37.4 12 3.7	9.903 4739 4 0996	0,
	19	4 19.04	3./	9.907 5735 4 0542	0,
	20	8 54 33.13 4 19.68	+16 3 33.7 12 32.0	9.911 6277 4 0093	8 59.8
	21	8 58 52.81 4 20.27	15 51 1.7 13 0.2	9.915 6370 3 9650	9 0.2
	22	9 3 13.08 4 20.80	15 38 1.5 13 28.2	9.919 6020 3 9210	9 0.6
	23	9 7 33.88 4 21.30	15 24 33·3 <sub>13 56.2</sub>	9.923 5230 3 8776	9 1.0
	24	9 11 55.18 4 21.74 9 16 16.92	15 10 37.1 <sub>14 23.7</sub> 14 56 13.4 <sub>14 51.1</sub>	9.927 4006 3 8347	9 1.4
	25	9 10 10.92 4 22.15	14 50 13.4 14 51.1	9.931 2353 3 7921	9 1.8
	26	9 20 39.07 4 22.49	+14 41 22.3 15 18.3	9.935 0274 3 7501	9 2.2
	27	9 25 1.56 4 22.81	14 26 4.0	9.938 7775 3 7086	9 2.7
	28	9 29 24.37 4 23.08	14 10 18.9 16 11.5	9.942 4861 3 6676	9 3.1
	29	9 33 47.45 4 22.21	13 54 7.4 16 37.7	9.946 1537 3 6271	9 3.6
01-4	30	9 38 10.76 4 23.51	13 37 29.7 17 3.5	9.949 7808 3 5872	9 4.0
Okt.	1	9 42 34.27 4 23.68	13 20 26.2 17 28.9	9.953 3680 3 5479	9 4.5
	2	9 46 57.95 4 23.81	+13 2 57.3 17 53.9	9.956 9159 3 5093	9 4.9
	3	9 51 21.76 4 23.92	12 45 3.4 18 18 5	9.960 4252 3 4712	9 5.3
	4	9 55 45.68 4 24.01	12 26 44.9 18 42.7	9.963 8964 3 4339	9 5.8
	5	10 0 9.69 4 24.07	12 8 2.2	9.967 3303 3 3073	9 6.3
	6	10 4 33.76	11 48 55.7 10 20.7	9.970 7276 2 2614	9 6.7
	7	10 8 57.88 4 24.16	11 29 26.0 19 52.7	9.974 0890 3 3258	9 7.2
	8	10 13 22.04	+II 0 22 2	9.977 4148 3 2910	9 7.7
	9	10 17 46 21 4 24.17	10 49 18.2	9.980 7058 3 2565	9 8.1
	10	10 22 10.41	10 28 41.1 20 58.5	9.983 9623 3 2226	9 8.6
	11	10 26 34.62 4 24.21	10 7 42.6	9.987 1849 3 1891	9 9.0
	12	10 30 58.83 4 24.21	9 46 23.1 21 40.0	9.990 3740 3 1560	9 9.5
	13	10 35 23.04	+ 9 24 43.1	9.993 5300	9 10.0

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940				- 61.03
Okt. 13	10 35 23.04 m s	+9 24 43.1 21 50.0	9.993 5300	0 IO.0
14	10 30 47.26	0 0 40 0	0.006.6522	9 10.4
15	10 44 11.47	8 40 22 0	0.000 7442	9 10.9
16	10 48 35.60 4 24.22	8 17 45 7	0.002 8024	9 11.3
17	TO 52 50 0T	7 54 40 2	0.005 8208 3 02/4	9 11.8
18	10 57 24.15 4 24.24	7 31 35.1 <sub>23 31.2</sub>	0.008 8270 2 9962	9 12.2
19	TT T 48.40	+7 × 20	0.011 7021	9 12.7
20	TT 6 T2 68 4 24.20	6 44 16.0	2 9344	9 13.2
21	77 70 26 00 4 24.31	6 20 12 2 24 3.7	2 9039	9 13.7
22	TT TE T 24 4 24.35	F FF F2 2	2 0/30	9 14.1
23	TI TO 25.74	5 at to 4 33.0	4 043/	9 14.6
24	11 23 50.21 4 24.47 4 24.53	5 6 31.5	0.023 3477 2 8138 0.026 1615 2 7844	9 15.0
25	TT 28 TA 74	+4 47 20 2	0.028 9459	
26	TT 22 20 26 T 24.02	4 76 76 7 23 14.1	0.001 7010 -/33	9 15.5
27	TT 27 407	25 20.1	2 /201	9 16.5
28	4- 00 00 4 24.02	2 25 72 6 -3 3/•3	0.027 7046	9 16.9
29	TT 45 52 84 4 24.95	2 50 24 2 25 40.3	0.020 7026	9 17.4
30	TT 50 18.02 # 25.00	2 22 26.0 25 50.3	2 0400	9 17.9
	4 25.23	20 7.0		
Nov. 1	11 54 44.15 4 25.4°	+2 7 18.4 26 16.3	0.045 0476 2 5857	9 18.4
2	72 2 25 14 25.59	I 4I 2.I 26 24.3	0.047 6333 2 5588	9 18.8
	4 25.79	1 14 37.8 26 31.5 0 48 6.3 26 28 1	0.050 1921 2 5322	9 19.3
3 4	12 12 26 06 4 20.03	20 30.1	0.052 7243 2 5061	9 19.8
5	6 4 20,20	0 20 44.0	0.055 2304 2 4803 0.057 7107 2 4540	9 20.3
	4 26.56	-6 5 15.8 <sub>26 49.1</sub>	- דעד	9 20.8
6	12 21 19.80 4 26.87	-0 32 4.9 26 53.6	0.060 1656 2 4300	9 21.3
7	12 25 46.67 4 27.21	0 58 58.5 26 57.5	0.062 5956 2 4055	9 21.8
8	12 30 13.88 4 27.57	1 25 50.0 27 0.5	0.005 0011	9 22.3
9	12 34 41.45 4 27.97	1 52 50.5 27 2.8	0.067 3822 2 3571	9 22.8
10	12 39 9.42 4 28.39	2 19 59.3 27 4.5	0.069 7393 2 3333	9 23.4
II	12 43 37.81 4 28.85	2 47 3.8 27 5.4	0.072 0726 2 3097	9 23.9
12	12 48 6.66	-3 14 9.2 <sub>27 5.6</sub>	0.074 3823 2 2864	9 24.4
13	12 52 35.99 4 20.84	3 41 14.8	0.076 6687	9 25.0
14	12 57 5.83 4 30.40	4 8 19.9 27 3.8	0.078 9321	9 25.5
15	13 1 36.23 <sub>4.30.07</sub>	4 35 23.7 27 1.8	0.081 1726	9 26.1
16	13 6 7.20 4 31.58	5 2 25.5 26 59.1	0.083 3905	9 26.7
17	13 10 38.78 4 32.22	5 29 24.6 26 55.6	0.085 5859 2 1731	9 27.3
18	13 15 11.00 4 32.89	-5 56 20.2 26 FL 2	0.087 7590 2 1509	9 27.9
19	13 19 43.89 4 33.59	6 23 11.5 26 46 2	0.089 9099 2 1288	9 28.5
20	13 24 17.48 4 33.39	0 49 57.0 26 40 #	0.092 0387 2 1060	9 29.1
21	13 28 51.80	7 16 38.3 26 33.9	0.094 1456 20850	9 29.7
22	13 33 26.87	7 43 12.2 26 26.6	0.096 2306 2 0634	9 30.4
23	13 38 2.73	-8 9 38.8	0.098 2940	9 31.1

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940 Nov. 23 24 25 26 27 28 29 30 Dez. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	13 38 2.73 4 36.67 13 42 39.40 4 36.67 13 47 16.90 4 38.36 13 51 55.26 4 49.15 14 1 14.65 4 41.07 14 5 55.72 4 42.02 14 10 37.74 4 43.00 14 15 20.74 4 43.98 14 20 4.72 4 44.99 14 24 49.71 4 46.02 14 29 35.73 4 47.08 14 34 22.81 48.14 14 39 10.95 4 49.23 14 44 0.18 4 50.34 14 48 50.52 4 51.46 14 53 41.98 1 50.34 14 48 50.52 1 51.46 14 53 41.98 1 52.60 14 58 34.58 4 53.75 15 3 28.33 15.66 5 2.05	- 8 9 38.8 26 18.5 8 35 57.3 26 9.5 9 2 6.8 25 59.7 9 28 6.5 25 49.4 9 53 55.9 25 38.0 10 19 33.9 25 25.9 -10 44 59.8 11 10 12.7 24 59.2 11 35 11.9 24 44.7 11 59 56.6 24 29.4 12 24 26.0 24 13.2 12 48 39.2 23 56.3 -13 12 35.5 23 38.5 13 36 14.0 23 20.0 13 59 34.0 23 0.7 14 22 34.7 22 40.6 14 45 15.3 22 19.7 15 7 35.0 21 58.1 -15 29 33.1 21 35.5 15 51 8.6 21 12.3 16 12 20.9 20 48.3 16 33 9.2 20 23.4 16 53 32.6 19 57.9 17 13 30.5 19 31.5 -17 33 2.0 19 4.5	0.098 2940 0.100 3357 0.102 3560 0.104 3550 0.106 3328 0.108 2896 0.108 2896 0.108 2896 0.110 2257 0.112 1414 1 8954 0.114 0368 1 8753 0.115 9121 1 8558 0.117 7679 1 8363 0.119 6042 1 8171 0.121 4213 1 7984 0.123 2197 1 7797 0.124 9994 1 7613 0.126 7607 1 7433 0.128 5040 1 7253 0.130 2293 1 7075 0.131 9368 1 6900 0.133 6268 1 6725 0.135 2993 1 6552 0.136 9545 0.138 5926 1 6042 0.141 8178 1 5873	9 31.1 9 31.7 9 32.4 9 33.1 9 33.8 9 34.6 9 35.3 9 36.1 9 36.9 9 37.7 9 38.5 9 39.3 9 40.2 9 41.0 9 41.9 9 42.8 9 43.7 9 44.7 9 45.6 9 46.6 9 47.6 9 49.7 9 50.7 9 51.8
18	15 38 17.61 5 3.24	17 52 6.5 18 36.6	0.143 4051 1 5707	9 52.9
19	15 43 20.85 5 4.43	18 10 43.1 18 8.0	0.144 9758 1 5539	9 54.0
20	15 48 25.28 5 5.61	18 28 51.1 17 38.6	0.146 5297 1 5374	9 55.2
21	15 53 30.89 5 6.79	18 46 29.7 17 8.6	0.148 0671 1 5208	9 56.3
22	15 58 37.68 5 7.94	19 3 38.3 16 37.8	0.149 5879 1 5044	9 57.5
23	16 3 45.62 5 9.09	-19 20 16.1 16 6.4 19 36 22.5 15 34.1 19 51 56.6 15 1.4 20 6 58.0 14 27.7 20 21 25.7 13 53.7 20 35 19.4 13 18.8	0.151 0923 1 4879	9 58.7
24	16 8 54.71 5 10.20		0.152 5802 1 4715	9 59.9
25	16 14 4.91 5 11.31		0.154 0517 1 4551	10 1.2
26	16 19 16.22 5 12.37		0.155 5068 1 4390	10 2.4
27	16 24 28.59 5 13.42		0.156 9458 1 4230	10 3.7
28	16 29 42.01 5 14.44		0.158 3688 1 4270	10 5.0
29	16 34 56.45 5 15.42	-20 48 38.2 12 43.4	0.159 7758 1 3914	10 6.3
30	16 40 11.87 5 16.37	21 1 21.6 12 7.5	0.161 1672 1 3759	10 7.6
31	16 45 28.24 5 17.29	21 13 29.1 11 30.9	0.162 5431 1 3666	10 9.0
32	16 50 45.53	-21 25 0.0	0.163 9037	10 10.3

-0.2	Oh Welt-Zeit			Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940				
Jan. o	23 50 37.82 m s	- 1° 25′ 11.2 1′ 2″g	0.104 9185 2 8416	17 15.5
I	22 52 480	T 7 46 4	0 70 7 7607	17 14.0
2	22 55 21 86	0 50 27 6	00 . 2 0203	17 12.5
3	22 57 50 01	0 22 568 1/ 24.0	0.112.4022	17 11.0
4	0 0 06 06 2 2/.23	- 0 If 20 0 1/ 24.0	0.116 2050 2 7882	17 9.5
5	0 2 53.61 2 27.45	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.118 9932 2 7747	17 8.0
6	0 5 07 06	+ 0 10 157	0.121.7670	17 6.5
7	0 7 48.63 2 27.57	0 26 28.0 1/ 23.2	0 704 5000	17 5.1
8	0 10 16.32 2 27.81	0 54 1.4 <sub>17 21.6</sub>	0.124 5290 2 7475	17 3.6
9	0 12 44.13 2 27.93	I II 23.0 17 20.6	0.130 0102 2 7199	17 2.1
10	0 15 12.06 2 28.05	1 28 43.6 17 19.5	0.132 7301 2 7060	17 0.6
11	0 17 40.11 2 28.17	1 46 3.1 17 18.3	0.135 4361 2 6919	16 59.2
12	0 20 8.28 2 28.30	+ 2 3 21.4 17 16.8	0.138 1280 2 6779	16 57.7
13	0 22 36.58 2 28.43	2 20 38.2 17 15.3	0.140 8059 2.6620	16 56.2
14	0 25 5.01 2 28.55	2 37 53·5 <sub>17 13.7</sub>	0.143 4698 2 6407	16 54.8
15	0 27 33.56 2 28.69	2 55 7.2 17 11.8	0.140 1195	16 53.3
16	0 30 2.25 2 28.81	3 12 19.0	0.148 7552 2.6215	16 51.8
17	0 32 31.06 2 28.94	3 29 28.8 17 7.8	0.151 3767 2 6074	16 50.4
18	0 35 0.00 2 29.07	+ 3 46 36.6	0.153 9841 2 5934	16 48.9
19	0 37 29.07 2 20.20	4 3 42.1 17 3.0	0.150 5775 2 5702	16 47.5
20	0 39 58.27 2 20.34	4 20 45.1 17 0.6	0.159 1568	16 46.0
21	0 42 27.01	4 37 45.7 16 57.9	0.161 7223 2 5516	16 44.6
22	0 44 57.08 2 29.61	4 54 43.0 16 55.1	0.104 2739 2 5278	16 43.1
23	0 47 26.69 2 29.75	5 11 38.7 16 52.2	0.100 8117 2 5242	16 41.7
24	0 49 56.44 2 29.89	+ 5 28 30.9 <sub>16 49.1</sub>	0.169 3359 2 5107	16 40.2
25	0 52 26.33 2 30.04	5 45 20.0 16 46.0	0.171 8466	16 38.8
26	0 54 50.37 2 30.10	6 2 6.0 16 42.6	0.174 3439 2.4840	16 37.3
27	0 57 26.56 2 30.34	6 18 48.6 16 39.3	0.176 8279 2 4708	16 35.9
28	0 59 56.90 2 30.51	6 35 27.9 16 35.7	0.179 2987 2 4578	16 34.5
29	I 2 27.4I <sub>2 30.69</sub>	6 52 3.6 16 32.2	0.181 7565 2 4446	16 33.0
30	1 4 58.10 2 30.86	$+$ 7 8 35.8 $_{16\ 28.4}$	0.184 2011 2 4317	16 31.6
31	1 7 28.96 2 31.05	7 25 4.2 16 24.5	0.186 6328	16 30.2
Febr. 1	I TO 0.0T 2 31.24	7 41 28.7 16 20.6	0.189 0514 2 4055	16 28.8
2	1 12 31.25 2 31.44	7 57 49.3 16 16.5	0.191 4569	16 27.3
3	1 15 2.09 2 27 64	8 14 5.8 16 12.3	0.193 8493	16 25.9
4	1 1/ 34-33 2 31.85	8 30 18.1 16 8.0	0.196 2284 2 3658	16 24.5
5	1 20 6.18	+ 8 46 26.1 16 3.5	0.198 5942	16 23.1
6	I 22 38.24 2 22 27	9 2 29.0	0.200 9466	16 21.7
7	1 25 10.51 2 22.40	9 18 28.0 15 54.3	0.203 2855 2 3255	16 20.3
8	I 27 43.00 2 22 71	9 34 22.9 15 40.6	0.205 6110 2 3121	16 18.9
9	1 30 15.71	9 50 12.5 15 44.6	0.207 9231 2 2985	16 17.5
10	I 32 48.65	+10 5 57.1	0.210 2216	16 16.1

			Oh Welt-Zeit		Obere Kul-
Tag		Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
194	0				1904
Febr.	10	1 32 48.65 m s	+10 5 57.1 15 20 5	0.210 2216	16 16.1
	11	T 25 2T 80 2 33.13	10 21 266 3 39.5	0.212 5066 2 2850	16 14.7
	12	1 37 55.18 2 33.38 2 33.61	10 37 11.0 15 34.4	0.214 7779 2 2577	16 13.4
	13	1 40 28.79 2 33.84	10 52 40.1 15 23.6	0.217 0356 2 2440	16 12.0
	14	1 43 2.63 2 34.06	11 8 3.7 15 18.0	0.219 2796	16 10.6
	15	1 45 36.69 2 34.29	11 23 21.7 15 12.3	0.221 5100 2 2167	16 9.2
	16	1 48 10.98 2 34.52	+11 38 34.0 15 6.5	0.223 7267 2 2031	16 7.9
	17	1 50 45.50 2 34.75	11 53 40.5	0.225 9298	16 6.5
	18	1 53 20.25 2 34.00	12 8 41.1	0.228 1193 2 1761	16 5.1
	19	1 55 55.24 2 35.21	12 23 35.0 14 48.4	0.230 2954 2 1627	16 3.8
	20	1 58 30.45 2 35.45	12 38 24.0	0.232 4581	16 2.4
	21	2 I 5.90 <sub>2 35.68</sub>	12 53 6.0 14 35.6	0.234 6075 2 1363	16 1.1
	22	2 3 41.58 2 35.92	+13 7 41.6 14 29.1	0.236 7438 2 1232	15 59.7
	23	2 0 17.50 2 36.16	13 22 10.7	0.238 8670	15 58.4
	24	2 8 53.66 2 36.40	13 36 33.1 14 15.7	0.240 9773 2 0974	15 57.1
	25	2 11 30.06 2 36.65	13 50 48.8	0.243 0747 2 0847	15 55.7
	26	2 14 6.71 2 36.90	14 4 57.6	0.245 1594 2 0720	15 54-4
	27	2 16 43.61 2 37.16	14 18 59.4 13 54.8	0.247 2314 2 0593	15 53.1
	28	2 19 20.77 2 37.42	+14 32 54.2 13 47.6	0.249 2907 2 0467	15 51.8
3.5.0	29	2 21 58.19 2 37.69	14 46 41.8 13 40.4	0.251 3374 2 0240	15 50.4
März	1	2 24 35.88 2 37.96	15 0 22.2	0.253 3714 2 0213	15 49.1
	2	2 27 13.84 2 38.23	15 13 55.2 13 25.6	0.255 3927 2 0086	15 47.8
	3	2 29 52.07 2 38.51	15 27 20.8 13 18.0	0.257 4013 1 9958	15 46.5
	4	2 32 30.58 2 38.79	15 40 38.8 13 10.3	0.259 3971 1 9831	15 45.2
	5	<sup>2</sup> 35 9.37 <sub>2 39.07</sub>	+15 53 49.1	0.261 3802 1 9702	15 43.9
	6	2 37 48.44 2 30.34	16 6 51.6	0.263 3504	15 42.7
	7	2 40 27.78 2 39.63	16 19 46.2 12 46.7	0.265 3077 1 9444	15 41.4
	8	2 43 7.41 <sub>2 39.90</sub>	16 32 32.9 12 38.6	0.267 2521 1 9314	15 40.1
	9	2 45 47.31	16 45 11.5 12 30.4	0.269 1835 1 9184	15 38.8
	10	2 48 27.50 2 40.46	16 57 41.9 12 22.1	0.271 1019 1 9054	15 37.6
	II	2 51 7.96 2 40.73	+17 10 4.0 12 13.7	0.273 0073 1 8923	15 36.3
	12	2 53 48.09 2 41.02	17 22 17.7 12 5.2	0.274 8996 1 8793	15 35.0
	13	2 50 29.71 2 41 28	17 34 22.9 11 56.5	0.276 7789 1 8662	15 33.8
	14	2 59 10.99	17 46 19.4 11 47.9	0.278 6451 1 8532	15 32.5
	15	3 1 52.54 a 47 8a	17 50 7.3	0.280 4983 1 8401	15 31.3
MA	16	3 4 34.30 2 42.09	18 9 46.3 11 30.1	0.282 3384 1 8272	15 30.0
	17	3 7 16.45 2 42.35	+18 21 16.4	0.284 1656 1 8143	15 28.8
	18	3 9 58.80	18 32 37.5	0.285 9799 1801	15 27.6
	19	3 12 41.40	18 43 49.5	0.287 7814 . 7886	15 26.3
	20	3 15 24.20	18 54 52.2	0.289 5700	15 25.1
	21	3 10 7.30 2 43.36	19 5 45.0 10 44 1	0.291 3400 1 7625	15 23.9
	22	3 20 50.74	+19 16 29.7	0.293 1095	15 22.7

100	On Welt-Zeit			Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \cdot \Delta$	mination in Greenwich
1940	1	1		SLOT.
März 22	3 20 50.74 m s	+19 16 29.7	0.293 1095	15 22.7
23	3 23 34.36 2 43.86	19 27 4.2 10 25.0	0.294 8604 1 7387	15 21.5
24	3 26 18.22 2 44.11	19 37 29.2 10 15.3	0.296 5991 1 7264	15 20.3
25	3 29 2.33 2 44.36	19 47 44.5 10 5.5	0.298 3255 1 7143	15 19.1
26	3 31 46.69 2 44.60	19 57 50.0 9 55.8	0.300 0398 1 7021	15 17.9
27	3 34 31.29 2 44.86	20 7 45.8 9 45.8	0.301 7419 1 6900	15 16.7
28	3 37 16.15 2 45.11	+20 17 31.6 9 35.8	0.303 4319 1 6781	15 15.5
29	3 40 1.20	20 27 7.4 9 25.8	0.305 1100 1 6659	15 14.3
30	3 42 46.61 2 45.60	20 36 33.2 9 15.7	0.306 7759 1 6538	15 13.1
31	3 45 32.21 2 45.84	20 45 48.9 9 5.5	0.308 4297 1 6417	15 11.9
April 1	3 48 18.05 2 46.09	20 54 54.4 8 55.2	0.310 0714 1 6295	15 10.8
·2	3 51 4.14 2 46.34	21 3 49.6 8 44.8	0.311 7009 1 6173	15 9.6
3	3 53 50.48 2 46.56	+21 12 34.4 8 34.5	0.313 3182 1 6051	15 8.4
4	3 56 37.04 2 46.80	21 21 8.9 8 24.0	0.314 9233 1 5928	15 7.3
5	3 59 23.84 2 47.02	21 29 32.9 8 13.4	0.316 5161	15 6.1
6	4 2 10.86	21 37 46.3 8 2.8	0.318 0966 1 5683	15 4.9
7	4 4 58.10 2 47.46	21 45 49.1 7 52.1	0.319 6649 1 5560	15 3.8
8	4 7 45.56 2 47.67	21 53 41.2 7 41.3	0.321 2209 1 5436	15 2.6
9	4 IO 33.23 <sub>2 47.88</sub>	+22 1 22.5 7 30.5	0.322 7645 1 5313	15 1.5
10	4 13 21.11 2 48.08	22 8 53.0	0.324 2958 1 5189	15 0.3
II	4 16 9.19 2 48 27	22 16 12.7 7 8.7	0.325 8147 1 5066	14 59.2
12	4 18 57.46 2 48 45	22 23 21.4 6 57.7	0.327 3213	14 58.1
13	4 21 45.91 2 48.63	22 30 19.1 6 46.6	0.328 8154 1 4819	14 56.9
14	4 24 34.54 2 48.79	22 37 5.7 6 35.5	0.330 2973 1 4695	14 55.8
15	4 27 23.33 2 48.95	+22 43 41.2 6 24.3	0.331 7668 1 4574	14 54.7
16	4 30 12.28 2 49.11	22 50 5.5 6 13.0	0.333 2242	14 53.6
17	4 33 1.39 2 49.26	22 50 18.5 6 1.9	0.334 0094	14 52.5
18	4 35 50.65 2 49.39	23 2 20.4 5 50.5	0.336 1025 1 4212	14 51.3
19	4 38 40.04 2 40.53	23 8 10.9 5 39.1	0.337 5237 1 4093	14 50.2
20	4 41 29.57 2 49.65	23 13 50.0 5 27.7	0.338 9330 1 3975	14 49.1
21	4 44 19.22 2 49.77	+23 19 17.7 5 16.3	0.340 3305 1 3859	14 48.0
22	4 47 8.99 2 40 80	23 24 34.0 5 4.8	0.341 7164 1 3742	14 46.9
23	4 49 58.88	23 29 38.8 4 53.2	0.343 0906 1 3627	14 45.8
24	4 52 48.88 2 50.10	23 34 32.0	0.344 4533	14 44.7
25	4 55 38.98	23 39 13.7 4 30.1	0.345 8047 1 2300	14 43.6
26	4 58 29.19 2 50.31	23 43 43.8 4 18.4	0.347 1446 1 3285	14 42.5
27	5 I 19.50 <sub>2 50.39</sub>	+23 48 2.2 4 6.8	0.348 4731 1 3170	14 41.3
28	5 4 9.89 2 50.48	23 52 9.0 3 55.1	0.349 7901 1 3055	14 40.2
29	5 7 0.37 2 50 56	23 56 4.1 3 43.4	0.351 0956	14 39.1
30 Mai	5 9 50-93 2 50 64	23 59 47.5 3 31.7	0.352 3896 1 2824	14 38.0
Mai I	5 12 41.57 2 50.70	24 3 19.2 3 20.0	0.353 6720 1 2709	14 36.9
2	5 15 32.27	+24 6 39.2	0.354 9429	14 35.8

			Oh Welt-Zeit		Obere Kul-
Tag	3	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
194	10				105214
Mai	2	5 15 32.27 m s	+24 6 39,2 3 8,2	0.354 9429	14 35.8
	3	F TS 22 04 2 30.77		0 256 2022	14 34.8
	4	F 2T T2 86	21 72 122	0.257 4501	14 33.7
	5	F 24 4 72 2 30.00	24 74 20 6 " 44./	0 258 6862	14 32.6
	6	F 26 FF 6- 2 30.09	24 15 28.0 2 32.9 24 18 1.5 2 21.2	0.359 9108 1 2245	14 31.5
	7	5 29 46.53 <sub>2 50.92</sub>	24 20 22.7 2 9.3	0.361 1237 1 2011	14 30.4
	8	5 32 37.47 2 50.94	+24 22 32.0	0.362 3248 1 1895	14 29.3
	9	5 35 28.41 2 50.94	24 24 29.6	0.363 5143 1 1777	14 28.2
	10	5 38 19.35 2 50.93	24 26 15.3 1 33.9	0.364 6920	14 27.1
	II	5 41 10.28 2 50.91	24 27 49.2 1 22.1	0.365 8580	14 26.0
	12	5 44 1.19 2 50 88	24 29 11.3 1 10.3	0.367 0124	14 24.9
	13	5 46 52.07 2 50.83	24 30 21.6 0 58.5	0.368 1551 1 1311	14 23.8
	14	5 49 42.90 2 50.79	+24 31 20.1 0 46.8	0.369 2862 1 1195	14 22.7
	15	5 52 33.69 2 50.72	24 32 6.9 ° 35.0	0.370 4057 1 1080	14 21.6
	16	5 55 24.41 2 50 65	24 32 41.9 0 23.3	0.371 5137 1 0965	14 20.5
	17	5 58 15.06 2 50.57	24 33 5.2 0 11.5	0.372 6102 1 0853	14 19.4
	18	0 I 5.03 2 50.40	24 33 16.7 0 0.2	0.373 6955 1 0740	14 18.3
	19	0 3 50.12 2 50.39	24 33 16.5 0 11.9	0.374 7695 1 0629	14 17.2
	20	6 6 46.51 2 50.29	+24 33 4.6 0 23.6	0.375 8324 1 0519	14 16.1
	21	6 9 36.80	24 32 41.0 0 35.4	0.376 8843 1 0409	14 15.0
	22	0 12 20.99 2 50.07	24 32 5.6 0 46.9	0.377 9252 1 0299	14 13.9
	23	6 15 17.06 2 49.96	24 31 18.7 ° 58.6	0.378 9551 1 0191	14 12.8
	24	6 18 7.02 2 49.83	24 30 20.1	0.379 9742 1 0081	14 11.7
	25	6 20 56.85 2 49.71	24 29 9.9 1 21.7	0.380 9823 9972	14 10.6
	26	6 23 46.56 2 49.57	+24 27 48.2	0.381 9795 9863	14 9.5
	27	0 20 30.13	24 26 14.9 1 44.7	0.382 9658	14 8.4
	28	0 29 25.50 2 40.28	24 24 30.2 I 56.2	0.383 9411 9643	14 7.2
	29	0 32 14.84 2 49.13	24 22 34.0 2 7.6	0.384 9054 9534	14 6.1
	30	0 35 3.97 2 48 08	24 20 26.4 2 18.9	0.385 8588 9334	14 5.0
-	31	6 37 52.95 2 48.80	24 18 7.5 2 30.3	0.386 8012 9314	14 3.9
Juni	I	6 40 41.75 2 48.64	+24 15 37.2 2 41.6	0.387 7326 9204	14 2.7
	2	6 43 30.30	24 12 55.6 2 52.8	0.388 6530	14 1.6
	3	0 40 18.84	24 10 2.8	0.389 5623 8981	14 0.5
	4	0 49 7.11 2 48 08	24 0 58.8 3 15.2	0.390 4604 8870	13 59.3
	5	6 51 55.19 2 47.87	24 3 43.0 3 26.2	0.391 3474 8758	13 58.2
	6	0 54 43.00 2 47.67	24 0 17.4 3 37.3	0.392 2232 8646	13 57.0
	7	6 57 30.73 2 47.45	+23 56 40.1 3 48.2	0.393 0878 8534	13 55.9
	8	7 0 10.10 2 47.22	23 52 51.9 2 50.1	0.393 9412 8422	13 54.7
	9	7 3 5.40 2 46 00	23 48 52.8 4 9.9	0.394 7834 8310	13 53.6
	10	7 5 52.39 2 46.75	23 44 42.9 4 20.6	0.395 6144 8199	13 52.4
	II	7 8 39.14 2 46.50	23 40 22.3 4 31.4	0.396 4343 8088	13 51.3
	12	7 11 25.64	+23 35 50.9	0.397 2431	13 50.1

	O <sup>n</sup> Welt-Zeit			Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940	2			obs. c.
Juni 12	7 II 25.64 m s	+23 35 50.9	0.397 2431 7076	13 50.1
13	7 14 11 80	23 31 8.8 4 42.1	0 200 0 107 /9/0	13 48.9
14	7 16 57.88 2 45.99	23 26 16.1 4 52.7	0.208.8274	13 47-7
15	7 19 43.60 2 45.72	23 21 12.9 5 3.2 5 13.6	0.399 6032 7758	13 46.5
16	7 22 29.05 2 45.17	23 15 59.3 5 24.0	0.400 3681 7542	13 45-3
17	7 25 14.22 2 44.89	23 10 35.3 5 34.4	0.401 1223 7434	13 44.2
18	7 27 59.11 2 44.61	+23 5 0.9 5 44.6	0.401 8657 7328	13 43.0
19	7 30 43.72 2 44.33	22 59 16.3 5 54.8	0.402 5985 7221	13 41.8
20	7 33 28.05	22 53 21.5 6 4.9	0.403 3206 7116	13 40.6
21	7 30 12.08 2 42 75	22 47 16.6 6 14.9	0.404 0322	13 39.4
22	7 38 55.83 2 43.45	22 41 1.7 6 24.9	0.404 7333 6905	13 38.2
23	7 41 39.28 2 43.17	22 34 36.8 6 34.8	0.405 4238 6800	13 36.9
24	7 44 22.45 2 42.87	+22 28 2.0 6 44.7	0.406 1038 6696	13 35.7
25	7 47 5.32 2 42.57	22 21 17.3 6 54.4	0.406 7734 6500	13 34.5
26	7 49 47.89 2 42.27	22 14 22.9 7 4.1	0.407 4324 6484	13 33.2
27	7 52 30.16 2 41.98	22 7 18.8 7 13.7	0.408 0808 6378	13 32.0
28	7 55 12.14 2 41.67	22 0 5.1 7 23.2	0.408 7186 6270	13 30.8
29	7 57 53.81 2 41.37	21 52 41.9 7 32.6	0.409 3456 6164	13 29.5
30	8 0 35.18 2 41.06	+21 45 9.3 7 42.0	0.409 9620 6056	13 28.3
Juli 1	8 3 16.24 2 40.75	21 37 27.3 7 51.3	0.410 5076 5949	13 27.0
2	8 5 56.99 2 40.44	21 29 36.0 8 0.4	0.411 1625 5840	13 25.7
3	8 8 37.43 2 40.13	21 21 35.6 8 9.5	0.411 7465 5732	13 24.5
4	8 II 17.56 2 39.81 8 I3 57.37	21 13 26.1 8 18.6	0.412 3197 5623	13 23.2
5	3 31 31 2 39.49	21 5 7.5 8 27.4	0.412 8820 5514	13 21.9
6	8 16 36.86 2 39.16	+20 56 40.1 8 36.2	0.413 4334 5404	13 20.6
7	8 19 16.02 2 38.84	20 48 3.9 8 45.0	0.413 9738 5295	13 19.3
8	8 21 54.86 2 38.52	20 39 18.9 8 53.6	0.414 5033 5187	13 18.0
9	8 24 33.38 <sub>2 38.18</sub> 8 27 11.56	20 30 25.3 9 2.1	0.415 0220 5077	13 16.7
11	8 27 11.56 <sub>2 37.85</sub> 8 29 49.41 <sub>3 27.53</sub>	20 21 23.2 9 10.6 20 12 12.6	0.415 5297 4969	13 15.4
11	2 3/.52	9 19.0	0.416 0266 4861	13 14.1
12	8 32 26.93 2 37.18	+20 2 53.6 9 27.2	0.416 5127 4754	13 12.8
13	8 35 4.11 2 36.85	19 53 26.4 9 35.4	0.416 9881 4647	13 11.5
14	8 37 40.96 2 36.51	19 43 51.0 9 43.5	0.417 4528 4541	13 10.1
15	8 40 17.47 2 36.18	19 34 7.5 9 51.4	0.417 9069 4436	13 8.8
16	8 42 53.65 <sub>2 35.84</sub>	19 24 16.1 9 59.4	0.410 3505	13 7.5 13 6.1
	8 45 29.49 <sub>2</sub> 35.50	19 14 16.7 10 7.2	0.418 7835 4330	
18	8 48 4.99 2 35.18	+19 4 9.5 10 14.9	0.419 2061 4122	13 4.7
19	0 50 40.17 2 24 86	18 53 54.0	0.419 6183 4018	13 3.4
20 21	0 53 15.03	18 43 32.1 10 30.1	0.420 0201 3914	13 2.0
22	0 55 49.50 2 24 21	10 33 2.0	0.420 4115 3810	13 0.7
23	8 58 23.77 2 33.89 9 0 57.66	18 22 24.4 10 45.1 +18 11 39.3	0.420 7925 3706 0.421 1631	12 57.9
-31	) - 51.00	20 22 39'3	3.42.4.20	31.9

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	$\log \Delta$	mination in Greenwich
1940	4 2 2			
Juli 23	9 ° 57.66 m m	+18 11 39 3 10 52.3	0.421 1631 3601	12 57.9
24		18 0 47 0	0.421 5222	12 56.5
25	9 6 4.50 2 32.96	17 49 47.5 11 6.7	0.421 8720 349/	12 55.1
26		17 28 40.8	0.422 2121 3287	12 53.7
27	9 II 10.10 2 32.35	17 37 45.5 II 13.7 17 27 27.1 II 20.6	0.422 5408 3181	12 52.3
28	9 13 42.45 2 32.04	17 16 6.5 11 27.5	0.422 8589 3075	12 50.9
29	9 16 14.49 2 31.75	+17 4 39.0 11 34.2	0.423 1664 2969	12 49.5
30	9 18 46.24 2 31.44	16 53 4.8 11 40.9	0.423 4633 2861	12 48.1
31	9 21 17.68 2 31.16	16 41 23.9 11 47.4	0.423 7494 2754	12 46.7
Aug. 1	9 23 48.84 2 20 86	16 29 36.5	0.424 0248 2646	12 45.3
2	9 26 19.70	16 17 42.6 12 0.3	0.424 2894 2537	12 43.8
3	9 28 50.27 2 30.28	16 5 42.3 12 6.6	0.424 5431 2429	12 42.4
4		+15 53 35.7 12 12.7	0.424 7860 2321	12 40.9
5	4 30.00	15 41 23.0 12 18.8	0.425 0181 2211	12 39.5
6		15 29 4.2 12 24.7	0.425 2392 2102	12 38.1
7	9 38 49.67 2 29.14	15 16 39.5 12 30.6	0.425 4494 1993	12 36.6
8	9 41 18.81 2 28.86	15 4 8.9 12 36.4	0.425 6487 1885	12 35.2
9	9 43 47.67 2 28.57	14 51 32.5 12 42.0	0.425 8372	12 33.7
10	9 46 16.24 2 28 20	+14 38 50.5 12 47.6	0.426 0149 1670	12 32.2
11	9 48 44.53 2 28.03	14 26 2.9 12 53.1	0.426 1819 1562	12 30.7
12	9 51 12.56 2 27.75	14 13 9.8 12 58.5	0.426 3382	12 29.3
13	9 53 40.31 2 27 40	14 0 11.3 13 3.8	0.426 4839	12 27.8
14	9 50 7.80 2 27 24	13 47 7.5 13 9.0	0.426 6191	12 26.3
15	9 58 35.04 2 26.98	13 33 58.5 13 14.2	0.426 7437 1141	12 24.8
16		+13 20 44.3 13 19.2	0.426 8578 1036	12 23.3
17	10 3 28.76 2 26.49	13 7 25.1 13 24.2	0.426 9614	12 21.8
18	10 5 55.25 2 26.26	12 54 0.9 13 29.0	0.427 0544 826	12 20.3
19		12 40 31.9 12 22 8	0.427 1370 720	12 18.8
20	10 10 47.54 2 25.80	12 26 58.1 13 38.6	0.427 2090 615	12 17.3
21	2 25.59	12 13 19.5 13 43.1	0.427 2705 510	12 15.8
22	3 3 3 2 25.37	+11 59 36.4 13 47.7	0.427 3215 404	12 14.3
23	10 18 4.30	11 45 48.7	0.427 3619 299	12 12.8
24	10 20 29.47 2 24 06	11 31 50.0 13 56.5	0.427 3918 193	12 11.2
25	10 22 54.43 2 24 78	11 18 0.1 14 0.8	0.427 4111 85	12 9.7
26		11 3 59.3 14 4.0	0.427 4196	12 8.2
27	10 27 43.79 2 24.39	10 49 54.4 14 9.0	0.427 4173	12 6.7
28		+10 35 45.4 14 13.0	0.427 4041	12 5.1
29		10 21 32.4 14 16.8	0.427 3800 350	12 3.6
30		10 7 15.0 14 20.7	0.427 3450 459	12 2.0
Sont 31	70 00 11 00 2 23./1	9 52 54.9 14 24.4	0.427 2991 570	12 0.5
Sept. 1	2 23.54	9 38 30.5 14 27.9	0.427 2421 680	11 58.9
2	10 42 7.56	+ 9 24 2.6	0.427 1741	11 57.4

	Oh Welt-Zeit			Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940		200		
Sept. 2	10 42 7.56 m	+9 24 2.6	0.427 1741	II 57.4
3	10 44 30.95 2 23.39	9 9 31.1	0.427 0951	11 55.8
4	10 46 54.17 2 23.08	8 54 56.2 14 34.9	0.427 0040	11 54-3
5	10 49 17.25 2 22.93	8 40 18 1	0.426 9035 1124	11 52.7
6	10 51 40.18 2 22.78	8 25 36.7 14 41.4	0.426 7011	II 51.2
7	10 54 2.96 2 22.65	8 10 52.3 14 47.5	0.426 6677 1345	11 49.6
8	10 56 25.61	+7 =6 18	0.426 5332	11 48.0
9	10 58 48.12 2 22.38	7 47 74 4 30.4	0.426 2870	11 46.5
10	II I 10.50 2 22.26	7 41 14.4 14 53.2 7 26 21.2 14 56.0	0.426 2317 1672	11 44.9
II	II 2 22.76	7 11 25.2 14 58.7	0.426 0645 1780	II 43.3
12	II 5 54.9I 2 22.04	6 56 26.5	0.425 8865 1888	11 41.8
13	11 8 16.95 2 21.93	6 41 25.3 15 3.8	0.425 6977 1996	11 40.2
14	11 10 38.88 2 21.84	+6 26 21.5 15 6.1	0.425 4981 2104	11 38.6
15	11 13 0.72 2 21.76	6 11 15.4 15 8.5	0.425 2877 2211	11 37.0
16	11 15 22.48 2 21.67	5 56 6.9 15 10.8	0.425 0666 2318	II 35.4
17	11 17 44.15 2 21.61	5 40 56.1 15 12.8	0.424 8348 2426	11 33.9
18	11 20 5.76 2 21.53	5 25 43.3	0.424 5022	II 32.3
19	11 22 27.29 2 21.48	5 10 28.3 15 16.9	0.424 3387 2535 2643	11 30.7
20	11 24 48.77 2 21.44	+4 55 11.4 15 18.8	0.424 0744 2753	11 29.1
21	11 27 10.21	4 39 52.6 15 20.6	0.423 7991 2862	11 27.6
22	11 29 31.59 2 21.35	4 24 32.0 15 22.4	0.423 5129 2972	II 26.0
23	11 31 52.94 2 21.33	4 9 9.6 15 24.0	0.423 2157 3082	11 24.4
24	11 34 14.27	3 53 45.0 15 25 6	0.422 9075 3103	II 22.8
25	11 36 35.57 2 21.29	3 38 20.0 15 27.1	0.422 5882 3304	II 21.2
26	11 38 56.86	+3 22 52.9 15 28.4	0.422 2578 3417	11 19.6
27	11 41 18.13 2 21.26	3 7 24.5 15 29.7	0.421 9161 3530	11 18.0
28	II 43 39.39 2 21.27	2 51 54.8 15 30.8	0.421 5631 3643	11 16.4
29	11 46 0.66	2 36 24.0 15 31.9	0.421 1988	11 14.8
30	11 48 21.93 2 21.28	2 20 52.1 15 32.9	0.420 8231 2872	11 13.3
Okt. 1	11 50 43.21 2 21.29	2 5 19.2 15 33.8	0.420 4359 3987	11 11.7
2	II 53 4.50 <sub>2 21.31</sub>	+1 49 45.4 15 34.5	0.420 0372	11 10.1
3	11 55 25.81	1 34 10.9 15 25 2	0.419 6270 4217	11 8.5
4	11 57 47.15 2 21.36	I 18 35.7 15 35.7	0.419 2053 4331	11 6.9
5	12 0 8.51 2 21.30	I 3 0.0 15 26 2	0.410 7722	II 5.3
6	12 2 29.90	0 47 23.7 15 36.6	0.418 3278 4557	11 3.8
7	12 4 51.33 2 21.47	0 31 47.1 15 36.9	0.417 8721 4670	II 2.2
8	12 7 12.80	+0 16 10.2 <sub>15 37.1</sub>	0.417 4051 4783	11 0.6
9	12 9 34.33 2 27 58	+0 0 33.1	0.416 9268 4806	10 59.0
10	12 11 55.91 2 21 64	-0 15 4.1 <sub>15 27 2</sub>	0.416 4372	10 57.4
II	12 14 17.55 a av m	0 30 41.3	0.415 9365 5120	10 55.8
12	12 10 39.27 2 21.79	0 40 18.4 15 37.0	0.415 4245 5231	10 54.3
13	12 19 1.06	−1 1 55.4	0.414 9014	10 52.7

		Oh Welt-Zeit			Obere Kul-
Tag		Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940					1301
011	13	12 19 1.06 m	- 1° 1′ 55.4 15′ 36.7	0.414 9014	10 52.7
	14	12 21 22.04	T T7 22 T	0.414 3672 5342	10 51.1
	15	12 23 44.02	т 22 8 г	0.412.8218 3434	10 49.5
	16	12 26 7.00	T 48 44 F	0 412 2652 5505	10 48.0
	17	12 28 29.19	2 4 700 *3 33.4	0.412 6076	10 46.4
	18	12 30 51.50 2 22.31 12 30 51.50	2 19 54.7 15 34.8 2 19 54.7 15 34.1	0.412 1186 5790	10 44.8
	19	T2 33 T2.02	- 2 25 28.8	0.411 5284 6014	10 43.3
	20	12 35 36.49 2 22.56	2 51 2.I 15 33.3 2 51 2.I 15 32.5	0.410 9270 6128	10 41.7
	21	12 37 59.19 2 22.85	3 6 34.6 15 31.4	0.410 3142 6242	10 40.1
	22	12 40 22.04 2 23.01	3 22 6.0 15 30.4	0.409 6900 6355	10 38.6
	23	12 42 45.05 2 23.16	3 37 36.4 15 29.3	0.409 0545 6471	10 37.0
	24	12 45 8.21 2 23.33	3 53 5.7 15 29.3	0.408 4074 6587	10 35.5
	25	12 47 31.54 2 23.50	$-4833.6_{1526.6}$	0.407 7487 6704	10 33.9
	26	12 49 55.04 2 23.68	4 24 0.2 15 25.1	0.407 0783 6821	10 32.4
	27	12 52 18.72 2 23.86	4 39 25.3 15 23.5	0.406 3962 6939	10 30.8
	28	12 54 42.58 2 24.04	4 54 48.8 15 21.9	0.405 7023 7057	10 29.3
	29	12 57 6.62 2 24.23	5 10 10.7 15 20.0	0.404 9966 7176	10 27.8
	30	12 59 30.85 2 24.43	5 25 30.7 15 18.1	0.404 2790 7293	10 26.2
	31	13 1 55.28 <sub>2 24.63</sub>	- 5 40 48.8 <sub>15 16.1</sub>	0.403 5497 7412	10 24.7
Nov.	1	13 4 19.91 2 24.83	5 56 4.9 15 14.0	0.402 8085 7531	10 23.2
	2	13 0 44.74 2 25.03	0 11 18.9	0.402 0554 7648	10 21.6
	3	13 9 9.77 2 25.25	6 26 30.7	0.401 2906 7766	10 20.1
	4	13 11 35.02 2 25.46	6 41 40.1 15 6.9	0.400 5140 7883	10 18.6
	5	13 14 0.48 2 25.69	6 56 47.0 15 4.4	0.399 7257 8000	10 17.1
	6	13 16 26.17 2 25.92	$-71151.4_{151.7}$	0.398 9257 8115	10 15.6
	7	13 18 52.09 2 26.15	7 26 53.1 14 59.0	0.398 1142 8231	10 14.1
	8	13 21 18.24 2 26.30	7 41 52.1 14 56.2	0.397 2911 8346	10 12.6
	9	13 23 44.63 2 26.64	7 56 48.3 14 53.2	0.396 4565 8462	10 11.1
	10	13 26 11.27 2 26.90	8 II 41.5 <sub>IA 50.1</sub>	0.395 6103 8576	10 9.6
	II	13 28 38.17 2 27.15	8 20 31.0 14 47.0	0.394 7527 8692	10 8.1
	12	13 31 5.32 <sub>2 27.43</sub>	- 8 41 18.6 <sub>14 43.7</sub>	0.393 8835 8806	10 6.6
	13	$^{13}$ 33 32.75 $_{2}$ $_{27.70}$	8 56 2.3 14 40.3	0.393 0029 8922	10 5.1
	14	13 30 0.45	9 10 42.6 14 36.9	0.392 1107 9037	10 3.6
	15	13 38 28.43 2 28.27	9 25 19.5 14 33.3	0.391 2070 9152	10 2.1
	16	13 40 56.70 2 28.56	9 39 52.8 14 29.7	0.390 2918 9268	10 0.7
	17	13 43 25.26 2 28.87	9 54 22.5 14 25.9	0.389 3650 9384	9 59.2
	18	13 45 54.13 2 29.18	-10 8 48.4 <sub>14 22.0</sub>	0.388 4266 9501	9 57.8
	19	13 48 23.31 2 20.40	10 23 10.4	0.387 4765 9617	9 56.3
	20	13 50 52.80 2 29.81	10 37 20.4	0.386 5148 9735	9 54.9
	21	13 53 22.61	10 51 42.4	0.385 5413 9852	9 53.4
	22	13 55 52.74 2 30.46	11 5 52.1	0.384 5561 9972	9 52.0
2	23	13 58 23.20	-11 19 57.6	0.383 5589	9 50.6

-		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940	i a a			
Nov. 23	13 58 23.20 m s	-11 19 57.6 <sub>14</sub> "	0.383 5589 1 0091	9 50.6
24	14 0 54.00 2 31.13	11 33 58.7 14 1.1	0.382 5498 1 0211	9 49.1
25	14 3 25.13 2 31.48	11 47 55.2 13 51.9	0.381 5287 1 0332	9 47.7
26	14 5 56.61 2 31.81	12 1 47.1 13 47.0	0.380 4955 1 0453	9 46.3
27	14 8 28.42 2 32.16	12 15 34.1	0.379 4502	9 44.9
28	14 11 0.58 2 32.50	12 29 16.3 13 37.2	0.378 3928 1 0695	9 43.5
29	14 13 33.08 2 32.84	-12 42 53.5 <sub>13 32.0</sub>	0.377 3233 1 0817	9 42.1
30	14 16 5.92	12 56 25.5 13 26.7	0.376 2416 1 0936	9 40.7
Dez. 1	14 18 39.12 2 33.55	13 9 52.2 13 21.4	0.375 1480 1 1057	9 39.3
2	14 21 12.67 2 33.91	13 23 13.6 13 15.8	0.374 0423 1 1176	9 37.9
3	14 23 46.58	13 36 29.4 13 10.3	0.372 9247 1 1296	9 36.5
4	14 26 20.84 2 34.63	13 49 39.7 13 4.6	0.371 7951 1 1414	9 35.2
5	14 28 55.47 2 34.99	-14 2 44.3 <sub>12 58.7</sub>	0.370 6537 1 1531	9 33.8
6	14 31 30.46 2 35.36	14 15 43.0	0.369 5006	9 32.5
7	14 34 5.82 2 35.73	14 28 35.7 12 46.8	0.368 3357 1 1766	9 31.1
8	14 36 41.55 2 36.11	14 41 22.5 12 40.5	0.367 1591 1 1883	9 29.8
9	14 39 17.66 2 36.49	14 54 3.0 12 34.2	0.365 9708	9 28.4
10	14 41 54.15 2 36.88	15 6 37.2 12 27.8	0.364 7709 1 2115	9 27.1
11	14 44 31.03 2 37.27	-15 19 5.0 <sub>12 21.3</sub>	0.363 5594 1 2221	9 25.8
12	14 47 8.30 2 37.66	15 31 26.3 12 14.7	0.362 3363	9 24.5
13	14 49 45.96 2 38.06	15 43 41.0 12 8.0	0.301 1010	9 23.2
14	14 52 24.02 2 38.46	15 55 49.0	0.359 8554 1 2578	9 21.9
15	14 55 2.48 2 38.87	16 7 50.1 11 54.2	0.358 5976 1 2695	9 20.6
16	14 57 41.35 2 39.27	16 19 44.3 11 47.1	0.357 3281 1 2811	9 19.3
17	15 0 20.62 2 39.68	-16 31 31.4 <sub>11 39.9</sub>	0.356 0470 1 2929	9 18.0
18	15 3 0.30 2 40.10	16 43 11.3 11 32.6	0.354 7541 1 3046	9 16.7
19	15 5 40.40	16 54 43.9 11 25.2	0.353 4495 1 3164	9 15.4
20	15 8 20.91 2 40.93	17 6 9.1	0.352 1331 1 3284	9 14.2
21	15 II 1.84 2 41.34	17 17 26.8 11 10,1	0.350 8047 1 3402	9 12.9
22	15 13 43.18 2 41.77	17 28 36.9 11 2.4	0.349 4645 1 3523	9 11.6
23	15 16 24.95 2 42.18	-17 39 39·3 <sub>10 54·4</sub>	0.348 1122	9 10.4
24	15 19 7.13 2 42.50	17 50 33.7 10 46.5	0.346 7479 1 3763	9 9.2
25	15 21 49.72 2 43.01	18 1 20.2 <sub>10 28 4</sub>	0.345 3716 1 3883	9 7.9
26	15 24 32.73 2 42 47	18 11 58.6	0.343 9833	9 6.7
27	15 27 16.14 2 42 82	18 22 28.7 0	0.342 5828	9 5.5
28	15 29 59.97 2 44.22	18 32 50.5 10 13.3	0.341 1703 1 4245	9 4.3
29	15 32 44.19 2 44.63	-18 43 3.8 <sub>10 4.7</sub>	0.339 7458 1 4365	9 3.1
30	15 35 28.82	18 53 8.5 9 56.1	0.338 3093 1 4484	9 1.9
31	15 30 13.05 2 45.42	19 3 4.6 9 47.2	0.336 8609 1 4603	9 0.7
32	15 40 59.27	-19 12 51.8	0.335 4006	8 59.5

42.00		Oh Welt-Zeit		Obere Kul
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940				
Jan. o	o 5 52.37	-° 46′ 46.2′ ″	0.697 1058	17 29.2
I	0 6 17.65	0 43 45.3	0.698 4773 1 3644	17 25.
2	o 6 43.52 25.87	0 40 40.6 3 4.7	0.699 8417 1 3569	17 22.2
3	0 7 9.99 27.06	0 37 32.3 3 12.0	0.701 1986 1 3509	17 18.
4	0 7 37.05 27.63	0 34 20.3	0.702 5478 1 3412	17 15.
5	0 8 4.68 23.21	0 31 4.6 3 15.7	0.703 8890 1 3330	17 11.
6	0 8 32.89 28.77	-0 27 45.4 <sub>3 22.8</sub>	0.705 2220	17 8.
7	0 9 1.66 29.33	0 24 22.6 3 26.2	0.706 5465	17 4.
8	0 9 30.99 29.89	0 20 56.4 3 20.7	0.707 8623	17 1
9	0 10 0.88 30.44	0 17 26.7 3 33.1	0.709 1691 1 2075	16 58.
10	0 10 31.32	0 13 53.6 3 36.4	0.710 4666	16 54.0
11	0 11 2.29 31.50	0 10 17.2 3 39.6	0.711 7545 1 2782	16 51.
12	o II 33.79 <sub>32.03</sub>	-0 6 37.6 <sub>3 42.9</sub>	0.713 0327 1 2683	16 47.
13	0 12 5.82	$-0$ 2 54.7 $\frac{3}{3}$ 46.1	0.714 3010 1 2581	16 44
14	0 12 38.37 33.05	+0 0 51.4 3 49.2	0.715 5591	16 41.
15	0 13 11.42 33.56	0 4 40.6 3 52.2	0.716 8068	16 37.
16	0 13 44.98	0 8 32.8 3 55.2	0.718 0440	16 34.
17	0 14 19.02 34.53	0 12 28.0 3 58.2	0.719 2704 1 2155	16 30.
18	o 14 53-55 35.01	+0 16 26.2	0.720 4859 1 2044	16 27.
19	0 15 28.50 35.48	0 20 27.3 4 4.0	0.721 6903	16 24.
20	0 10 4.04 35.04	0 24 31.3 4 6.8	0.722 8835	16 20.
21	0 16 39.98 36.40	0 28 38.1 4 9.4	0.724 0653 1 1703	16 17.
22	0 17 16.38 36.84	0 32 47.5 4 12.2	0.725 2356 1 1588	16 14.
23	0 17 53.22 37.28	0 36 59.7 4 14.8	0.726 3944 1 1471	16 10.
24	0 18 30.50 37.72	+0 41 14.5 4 17.4	0.727 5415	16 7.
25	0 19 8.22 38.14	0 45 31.9 4 20.0	0.728 6768	16 4.
26	0 19 46.36 38.57	0 49 51.9 4 22.5	0.729 8002	16 I.
27	0 20 24.93 38.98	0 54 14.4 4 24.9	0.730 9116 1 0993	15 57.
28	0 21 3.91 39.39	0 58 39.3 4 27.4	0.732 0109 1 0871	15 54.
29	0 21 43.30 39.79	I 3 6.7 4 29.7	0.733 0980 1 0747	15 51.
30	0 22 23.09 40.19	+1 7 36.4 4 32.0	0.734 1727 1 0622	15 47.
31	0 23 3.28 40.58	1 12 8.4 4 34.4	0.735 2349 1 0496	15 44.
Febr. 1	0 23 43.86 40.97	1 16 42.8 4 36.5	0.736 2845 1 0369	15 41.
2	0 24 24.83 41.35	1 21 19.3 4 38.8	0.737 3214 1 0241	15 38.
3	0 25 6.18 41.72	1 25 58.1 4 40.9	0.738 3455 1 0112	15 34.
4	0 25 47.90 42.10	I 30 39.0 4 43.0	0.739 3567 9981	15 31.
5	0 26 30.00 42.45	+1 35 22.0 4 45.0	0.740 3548 9849	15 28.
6	0 27 12.45 42.81	I 40 7.0 4 47.I	0.741 3397 9717	15 25.
7	0 27 55.26 43.16	1 44 54.1 4 49.0	0.742 3114 9582	15 21.
8	0 28 38.42	1 49 43.1 4 50.9	0.743 2696 9447	15 18.
9	0 29 21.93 43.84	1 54 34.0 4 52.7	0.744 2143 9311	15 15.
10	0 30 5.77	+r 59 26.7	0.745 1454	15 12.

-bell-mol.		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940			Bibl. Jag.	01.
Febr. 10	o 30 5.77	+1 59 26.7 / 54.6	0.745 1454 0174	15 12.3
11	<ul> <li>30 5.77 44.17</li> <li>30 49.94 44.40</li> </ul>	2 4 21.2	0.746.0628	15 9.1
12	0 21 24 42	2 2 7 6 4 50.3	0 746 0667 903/	15 5.0
13	0 22 10 22	2 14 15.6 4 58.0	0 747 8764	15 2.8
14	0 22 4 25	2 10 15.2 4 39.0	. 0	14 59.0
15	o 33 49.77 45.71	2 24 16.5 5 1.3	0.748 73 <sup>24</sup> 86 <sub>19</sub> 0.749 5943 8480	14 56.
16	o 34 35.48 <sub>46.00</sub>	+2 29 19.3 5 4-4	0.750 4423 8339	14 53.
17	0 35 21.48 46.28	2 34 23.7	0.751 2762 8198	14 50.0
18	0 36 7.76 46.57	2 39 29.4 5 7.2	0.752 0960 8057	14 46.0
19	0 36 54.33 46.83	2 44 36.6 5 8.6	0.752 9017 7916	14 43.8
20	0 37 41.16 47.10	2 49 45.2 5 9.9	0.753 6933 7774	14 40.0
21	0 38 28.26 47.36	2 54 55.1 5 11.2	0.754 4707 7633	14 37-4
22	0 39 15.62 47.61	+3 0 6.3 5 12.4	0.755 2340 7491	14 34.
23	0 40 3.23 47.85	3 5 18.7 5 13.6	0.755 9831 7248	14 31.
24	0 40 51.08 48.11	3 10 32.3 5 14.8	0.756 7179 7206	14 28.
25	0 41 39.19 48.34	3 15 47.1 5 15.9	0.757 4385 7064	14 24.
26	0 42 27.53 48.58	3 21 3.0 5 16.0	0.758 1449 6021	14 21.
27	0 43 16.11 48.81	3 26 19.9 5 18.1	0.758 8370 6778	14 18.0
28	0 44 4.92 49.04	+3 31 38.0 5 19.0	0.759 5148 6634	14 15.
29	o 44 53.96 49.26	3 36 57.0 5 20.0	0.760 1782	14 12.
März 1	0 45 43.22	3 42 17.0 5 20.9	0.760 8272 6246	14 9.
2	0 46 32.70 49.69	3 47 37.9 5 21.8	0.761 4618	14 6.
3	0 47 22.39 40.00	3 52 59.7 5 22.7	0.762 0818 6054	14 3.
4	0 48 12.29 50.10	3 58 22.4 5 23.4	0.762 6872 5908	14 0.0
5	0 49 2.39 50.29	+4 3 45.8 5 24.2	0.763 2780 5761	13 56.
6	0 49 52.68 50.40	4 9 10.0 5 25.0	0.763 8541 6614	13 53
7	0 50 43.17 50.68	4 14 35.0 5 25.6	0.764 4155	13 50.
8	0 51 33.85 50.86	4 20 0.6 5 26.2	0.764 9622 5319	13 47.
9	0 52 24.71 51.03	4 25 26.8	0.705 4941	13 44.
10	o 53 15.74 <sub>51.20</sub>	4 30 53.6 5 27.4	0.766 0112 5024	13 41.
II	0 54 6.94 51.37	+4 36 21.0 5 27.9	0.766 5136 4875	13 38.
12	0 54 58.31 51.53	4 41 48.9 5 28.4	0.767 0011	13 35.
13	0 55 49.84 51.68	4 47 17.3 5 28.8	0.767 4738 4579	13 32.
14	0 56 41.52 51.82	4 52 46.1 5 29.1	0.767 9317	13 29.
15	o 57 33·34 51.97	4 58 15.2 5 29.5	0.768 3747 4282	13 26.
16	0 58 25.31 52.11	5 3 44.7 5 29.8	0.768 8029 4133	13 23.
17	0 59 17.42 52.24	+5 9 14.5 5 30.0	0.769 2162 3984	13 19.
18	I 0 9.66 52.36	5 14 44.5 5 30.3	0.769 6146 2826	13 16.
19	I I 2.02 52.49	5 20 14.8 5 30.4	0.769 9982 3688	13 13.
20	1 1 54.51 52.61	5 25 45.2 5 30.6	0.770 3670 3541	13 10.
21	I 2 47.I2	5 31 15.8 5 30.7	0.770 7211 2204	13 7.
22	1 3 39.84	+5 36 46.5	0.771 0605 3394	13 4.

		On Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940				Sych
März 22	1 3 39.84 52.84	+5 36 46.5 2 20.8	0.771 0605	13 4.6
23	1 4 32.68	F 42 17 2	0.771 2852 344/	13 1.6
24	T 7 27 6T 3-193	E 17 18 2 5 30.9	0.771 6052	12 58.5
25	T 6 18.65 53.04	T TO TO 0	0.771 9908 2955	12 55.5
26	T 7 TI 70 53.14	0 to 0 5 30.0	0.772 2716 2660	12 52.4
27	1 8 5.03 53.24 5.03 53.33	5 58 49.8 5 30.8 6 4 20.6 5 30.7	0.772 5376 2514	12 49.3
28	I 8 58.36	+6 9 51.3 5 30.6	0.772 7890 2367	12 46.3
29	1 9 51.78 53.42	6 15 21.9 5 30.4	0.773 0257 2220	12 43.3
30	1 10 45.28	6 20 52.3 5 30.3	0.773 2477 2072	12 40.2
31	1 11 38.86 53.66	6 26 22.6 5 30.0	0.773 4549 1924	12 37.2
April 1	I 12 32.52 53.73	6 31 52.6 5 29.8	0.773 6473 1776	12 34.1
2	I 13 26.25 53.80	6 37 22.4 5 29.5	0.773 8249 1630	12 31.1
3	I 14 20.05 53.86	+6 42 51.9 5 29.2	0.773 9879 1481	12 28.1
4	1 15 13.91 53.92	6 48 21.1 5 28.8	0.774 1360 1332	12 25.0
5	I 16 7.83 53.97	6 53 49.9 5 28.4	0.774 2692 1185	12 22.0
6	I 17 1.80 54.01	6 59 18.3 5 28.0	0.774 3877 1037	12 18.9
7	1 17 55.81	7 4 46.3 5 27.5	0.774 4914 890	12 15.9
8	1 18 49.87 54.10	7 10 13.8 5 27.0	0.774 5804 741	12 12.9
9	1 19 43.97 54.13	+7 15 40.8 5 26.5	0.774 6545 593	12 9.8
10	1 20 38.10	7 21 7.3 5 25.9	0.774 7138 445	12 6.8
II	1 21 32.26 54.19	7 26 33.2 5 25.4	0.774 7583 296	12 3.8
12	1 22 26.45 54.20	7 31 58.6 5 24.7	0.774 7879 149	12 0.7
13	1 23 20.65 54.22	7 37 23.3 5 24.0	0.774 8028 2	11 57.7
14	1 24 14.87 54.22	7 42 47.3 5 23.3	0.774 8030 144	11 54.7
15	1 25 9.09 54.24	+7 48 10.6 5 22.5	0.774 7886	11 51.6
16	I 26 3.33 54.23	7 53 33.1 5 21.8	0.774 7596 435	11 48.6
17	1 26 57.56 54.23	7 58 54.9 5 21.0	0.774 7161 580	11 45.6
18	1 27 51.79 54.22	8 4 15.9 5 20.2	0.774 6581 725	11 42.5
19	1 28 46.01 54.21	8 9 36.1 5 19.3	0.774 5856 869	11 39.5
20	1 29 40.22 54.19	8 14 55.4 5 18.4	0.774 4987 1014	11 36.5
21	1 30 34.41 54.18	-+-8 20 13.8 <sub>5 17.6</sub>	0.774 3973 1157	11 33.4
22	1 31 28.59 51.16	8 25 31.4 5 16.6	0.774 2816 1301	11 30.4
23	I 32 22.75	8 30 48.0 5 15.6	0.774 1515 1445	11 27.4
24	1 33 16.88 54.10	8 36 3.6	0.774 0070 1588	11 24.3
25	1 34 10.98	8 41 18.2 5 13.7	0.773 8482 1732	II 21.3
26	1 35 5.05 54.03	8 46 31.9 5 12.6	0.773 6750 1876	11 18.3
27	I 35 59.08 54.∞	+8 51 44.5 5 11.6	0.773 4874 2019	11 15.2
28	1 30 53.08 53.95	8 56 56.1	0.773 2855 2163	II 12.2
29	1 37 47.03 <sub>53.01</sub>	9 2 6.5 5 9.4	0.773 0692 2306	11 9.2
Mo: 30	1 38 40.94	9 7 15.9 5 8.2	0.772 8386 2450	11 6.1
Mai 1	I 39 34.79 53.79	9 12 24.1 5 7.0	0.772 5936 2593	11 3.1
2	1 40 28.58	+9 17 31.1	0.772 3343	11 0.1

			Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich	
1940	)		A		1500
Mai	2	1 40 28.58 52 72	+ 9 17 31.1 5 5.8	0.772 3343 2777	II O.I
	3	7 47 00 07 55./5	0 22 260	0.772 0606 2737	10 57.0
	4	1 41 22.31 53.66 1 42 15.97 53.60	0 27 41.5	0.771 7726	10 54.0
	5	T 42 0 57	9 32 44.8 5 2.0	0.771 4702 3024	10 50.9
	6	T 44 2 08 33.31	9 37 46.8 5 0.7	0.771 1535	10 47.9
	7	1 44 56.52 53.44 53.34	9 42 47.5 4 59.3	0.770 8225 3310	10 44.8
	8	T 45 40.86	+ 0 47 46.8	0.770 4772	10 41.8
	9	T 46 43.TT	0 50 145 4 5/.9	0 770 TT77 3595	10 38.7
	10	T 47 26 26 33.13	0 57 41 2 4 30.5	0.769 7439 3738	10 35.7
	II	T 48 20.2T 33.03	TO 2 26 2 4 33.	0.769 3561 3078	10 32.6
	12	I 49 22.25 52.83	10 7 30.0 4 53.7	0.768 9541	10 29.6
	13	1 50 15.08 52.71	10 12 22.1 4 50.6	0.768 5380 4300	10 26.5
	14	T 5T 770	+TO 17 12 7	0.768 1080	10 23.5
	15	1 52 0.37 52.58 1 52 0.37 52.46	10 22 1.8 4 49.1	0 767 6640 4440	10 20.4
	16	I 52 52.83 52.33	10 26 49.3 4 47.5	0.767 2062 4570	10 17.3
	17	1 53 45.16 52.19	10 31 35.2	0.766 7346 4855	10 14.3
	18	I 54 37.35 52.05	10 36 19.5 4 44.3	0.766 2491 4991	10 11.2
	19	1 55 29.40 51.91	10 41 2.1 4 41.0	0.765 7500 5129	10 8.1
	20	1 56 21.31 51.76	+10 45 43.1 4 39.3	0.765 2371 5266	10 5.1
	21	1 57 13.07	10 50 22.4 4 37.6	0.764 7105	10 2.0
	22	1 58 4.68	10 55 0.0 4 35.9	0.764 1703 5538	9 58.9
	23	1 58 56.13 51.30	10 59 35.9 4 34.2	0.763 6165	9 55.8
	24	I 59 47.43 51.13	11 4 10.1 4 32.4	0.763 0491	9 52.8
	25	2 0 38.56 50.96	II 8 42.5 4 30.6	0.762 4681 5945	9 49.7
	26	2 I 29.52 50.79	+11 13 13.1 4 28.9	- 0.761 8736 <sub>6080</sub>	9 46.6
	27	2 2 20.31 50.61	11 17 42.0 4 27.0	0.761 2656 6216	9 43-5
	28	2 3 10.92 50.42	11 22 9.0	0.760 6440 6252	9 40.4
	29	2 4 1.34 50.23	11 26 34.1 4 23.3	0.760 0088 6486	9 37.3
	30	2 4 51.57 50.04	11 30 57.4	0.759 3602 6621	9 34.2
	31	2 5 41.61 49.83	11 35 18.7 4 19.4	0.758 6981 6756	9 31.1
Juni	I	2 6 31.44 49.63	+11 39 38.1 4 17.5	0.758 0225 6890	9 28.0
	2	2 7 21.07 40 41	11 43 55.6 4 15.5	0.757 3335 7022	9 24.9
	3	2 8 10.48 49.19	11 48 11.1 4 13.5	0.756 6312 7157	9 21.8
	4	2 8 59.67 48.97	11 52 24.6	0.755 9155 7289	9 18.6
	5	<sup>2</sup> 9 48.64 <sub>48.74</sub>	11 56 36.1 4 9.5	0.755 1866 7421	9 15.5
	6	2 10 37.38 48.50	12 0 45.6 4 7.3	0.754 4445 7553	9 12.4
	7	2 II 25.88 <sub>48.25</sub>	+12 4 52.9 4 5.3	0.753 6892 7683	9 9.3
	8	2 12 14.13 48.00	12 8 58.2 4 3.2	0.752 9209 7814	9 6.2
	9	2 13 2.13 47.75	12 13 1.4 4 1.0	0.752 1395 7043	9 3.0
	10	2 13 49.00 47.48	12 17 2.4 3 58.8	0.751 3452 8072	8 59.9
	II	2 14 37.36 47 22	12 21 1.2 3 56.7	0.750 5380 8200	8 56.7
	12	2 15 24.58	+12 24 57.9	0.749 7180	8 53.0

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940				200
Juni 12	2 15 24.58 s	+12 24 57.9 2 54 5	0.749 7180 8326	8 53.6
13	2 16 11.52 46.67	12 28 52.4 3 52.2	0.748 8854 8451	8 50.4
14	2 16 58.19 46.37	12 32 44.6 3 50.0	0.748 0403 8577	8 47.3
15	2 17 44.56 46.09	12 36 34.6 3 47.8	0.747 1826	8 44.1
16	2 18 30.65	12 40 22.4 3 45.5	0.746 3126 8824	8 40.9
17	2 19 16.44 45.50	$12 \ 44 \ 7.9 \ \frac{3}{3} \ \frac{43.5}{43.2}$	0.745 4302 8947	8 37.7
18	2 20 1.94 45.19	+12 47 51.1 3 40.9	0.744 5355 9069	8 34.6
19	2 20 47.13 44.88	12 51 32.0 3 46.9	0.743 6286 9190	8 31.4
20	2 21 32.01	12 55 10.6 3 36.2	0.742 7096	8 28.2
21	2 22 16.58 44.24	12 58 46.8 3 33.9	0.741 7785	8 25.0
22	2 23 0.82 43.92	13 2 20.7 3 31.5	0.740 8353	8 21.8
23	2 23 44.74 43.59	13 5 52.2 3 29.2	0.739 8802 9670	8 18.6
24	2 24 28.33 43.24	+13 9 21.4 3 26.7	0.738 9132 9789	8 15.4
25	2 25 11.57 42.89	13 12 48.1 3 24.3	0.737 9343 9907	8 12.2
26	2 25 54.46	13 16 12.4 3 21.8	0.736 9436 1 0025	8 8.9
27	2 26 37.01 42.18	13 19 34.2 3 19.4	0.735 9411 1 0142	8 5.7
28	2 27 19.19 41.81	13 22 53.6 3 16.9	0.734 9269 1 0258	8 2.5
29	2 28 1.00 41.43	13 26 10.5 3 14.4	0.733 9011 1 0372	7 59.2
30	2 28 42.43 41.05	+13 29 24.9 3 11.8	0.732 8639 1 0487	7 56.0
Juli 1	2 29 23.48 40.67	13 32 36.7 3 9.3	0.731 8152 1 0599	7 52.8
2	2 30 4.15 40.26	13 35 46.0 3 6.7	0.730 7553 1 0712	7 49-5
3	2 30 44.41 39.86	13 38 52.7	0.729 6841	7 46.2
4	2 31 24.27 39.44	13 41 56.8	0.728 6019 1 0932	7 43.0
5	2 32 3.71 39.02	13 44 58.3 2 58.8	0.727 5087 1 1040	7 39-7
6	2 32 42.73 38.59	+13 47 57.1 2 56.2	0.726 4047	7 36.4
7	2 33 21.32 38.16	13 50 53.3 2 53.5	0.725 2900 1 1252	7 33.1
8	2 33 59.48 37.72	13 53 46.8 2 50.8	0.724 1648	7 29.8
9	2 34 37.20 37.26	13 56 37.6 2 48.1	0.723 0292	7 26.5
10	2 35 14.46 36.81	13 59 25.7 2 45.4	0.721 8835	7 23.2
11	2 35 51.27 36.35	I4 2 II.I 2 42.7	0.720 7278 1 1656	7 19.8
12	2 36 27.62 35.87	+14 4 53.8 2 39.9	0.719 5622	7 16.5
13	2 37 3.49 35.40	14 7 33·7 2 37·1	0.718 3870 1 1848	7 13.2
14	2 37 38.89	14 10 10.8 2 34.3	0.717 2022	7 9.8
15	2 38 13.80	14 12 45.1	0.716 0081	7 6.5
16	2 38 48.23 33.03	14 15 16.6 2 28.7	0.714 8047	7 3.1
17	2 39 22.16 33.43	14 17 45.3 2 25.9	0.713 5923 1 2214	6 59.7
18	2 39 55.59 32.92	+14 20 11.2	0.712 3709 1 2302	6 56.3
19	2 40 28.51 32.41	I4 22 34.2 2 20.1	0.711 1407 1 2388	6 52.9
20	2 41 0.92 31.88	14 24 54.3 2 17.3	0.709 9019 1 2473	6 49.6
21	2 41 32.80 31.35	14 27 11.6 2 14.4	0.708 6546	6 46.2
22	2 42 4.15 30.82	14 29 26.0	0.707 3990 1 2638	6 42.7
23	2 42 34.97	14 31 37.5	0.706 1352	6 39.3

	On Welt-Zeit			Obere Kul-
	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
23 24	2 42 34.97 30.27 2 43 5.24 29.71 2 43 34.95 20.45	+14 31 37.5 2 8.6 14 33 46.1 2 5.6 14 35 51.7 2 3.7	0.706 1352 1 2718 0.704 8634 1 2797 0.703 5837 1 2872	6 39.3 6 35.9 6 32.4
26 27 28	2 44 4.10 28.58 2 44 32.68 28.01 2 45 0.69 27.42	14 37 54.4 1 59.7 14 39 54.1 1 56.7	0.702 2964 1 2947 0.701 0017 1 3019 0.699 6998 1 3089	6 29.0 6 25.5 6 22.1
29 30 31 1	2 45 28.11 <sub>26.82</sub> 2 45 54.93 <sub>26.22</sub> 2 46 21.15 <sub>25.61</sub> 2 46 46.76 <sub>24.99</sub>	+14 43 44.5 <sub>1</sub> 50.7 14 45 35.2 <sub>1</sub> 47.6 14 47 22.8 <sub>1</sub> 44.6 14 49 7.4 <sub>1</sub> 41.5	0.698 3909 1 3157 0.697 0752 1 3221 0.695 7531 1 3285 0.694 4246 1 3245	6 18.6 6 15.1 6 11.6 6 8.1
2 3 4	2 47 11.75 24.36 2 47 36.11 23.73 2 47 59.84 23.08	14 50 48.9 <sub>1 38.3</sub> 14 52 27.2 <sub>1 35.3</sub> +14 54 2.5 <sub>1 32.1</sub>	0.693 0901 1 3402 0.691 7499 1 3457 0.690 4042 1 2508	6 4.6 6 1.0 5 57.5
5 6 7 8 9	2 48 45·34 21·77 2 49 7·11 21·11 2 49 28·22 20·44	14 57 3.5 1 25.7 14 58 29.2 1 22.6 14 59 51.8 1 19.4	0.687 6977 1 3602 0.686 3375 1 3643 0.684 9732 1 3682	5 53.9 5 50.4 5 46.8 5 43.2 5 39.6
10 11 12 13 14	2 50 8.42 19.09 2 50 27.51 18.40 2 50 45.91 17.71 2 51 3.62 17.00 2 51 20.62 16.30	+15 2 27.4 1 13.0 15 3 40.4 1 9.8 15 4 50.2 1 6.6 15 5 56.8 1 3.3 15 7 0.1 1 0.0 15 8 0.1	0.682 2332 1 3749 0.680 8583 1 3778 0.679 4805 1 3804 0.678 1001 1 3827 0.676 7174 1 3846	5 36.0 5 32.4 5 28.8 5 25.1 5 21.5 5 17.8
16 17 18 19 20	2 51 52.51 14.87 2 52 7.38 14.15 2 52 21.53 13.43 2 52 34.96 12.69 2 52 47.65 11.95	+15 8 56.9 o 53.6 15 9 50.5 o 50.2 15 10 40.7 o 47.0 15 11 27.7 o 43.6 15 12 11.3 0 40.4	0.673 9465 1 3875 0.672 5590 1 3885 0.671 1705 1 3892 0.669 7813 1 3893 0.668 3920 1 3893	5 14.1 5 10.4 5 6.7 5 3.0 4 59.3 4 55.6
22 23 24 25 26	2 53 10.81 10.46 2 53 21.27 9.71 2 53 30.98 8.93 2 53 39.91 8.17 2 53 48.08 7.40	+15 13 28.7 ° 33.7 15 14 2.4 ° 3°.3 15 14 32.7 ° 27.0 15 14 59.7 ° 23.6 15 15 23.3 ° 29.2	0.665 6140 1 3879 0.664 2261 1 3866 0.662 8395 1 3849 0.661 4546 1 3829 0.660 0717 1 3803	4 51.8 4 48.1 4 44.3 4 40.5 4 36.7
27 28 29 30 31 1	2 54 2.10 5.83 2 54 7.93 5.05 2 54 12.98 4.26 2 54 17.24 3.46 2 54 20.70 2.66	+15 16 0.3 0 13.4 15 16 13.7 0 10.0 15 16 23.7 0 6.6 15 16 30.3 0 3.2 15 16 33.5 0 9.2	0.657 3142 1 3738 0.655 9404 1 3698 0.654 5706 1 3653 0.653 2053 1 3604 0.651 8449 1 3548	4 32.9 4 29.1 4 25.2 4 21.4 4 17.5 4 13.6 4 9.7
	24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 18 20 21 22 23 24 25 26 27 28 29 20 20 20 20 20 20 20 20 20 20	23	23	23

			Oh Welt-Zeit		Obere Kul-
Tag		Scheinbare Scheinbare Rektaszension Deklination		log Δ	mination in Greenwich
194	0				
Sept.	2	2 54 23.36	+15 16 33.2 1 26	0.650 4901	h m
Dept.		2 54 25 22	+15 16 33.2 ° 3.6 15 16 29.6 ° 5.1	0.649 1413	4 9.7
	3 4	2 74 26 28	TE 16 22 E /.1	0.647 7002	4 5.8
		2 54 26 54	15 16 11.9 12.0	0.646.4642 3330	0
	5	2 54 26.00	TC TC C80 13.9	0.645 1260 132/3	
	7	2 54 24.66	TE TE 40 7 - 1/-3	0 642 8178	
		2.14	0 20./	1 3103	3 50.1
	8	2 54 22.52 2.94	+15 15 20.0 0 24.2	0.642 5075 1 3009	3 46.1
	9	2 54 19.58 3.74	15 14 55.8 0 27.5	0.641 2066	3 42.1
	10	2 54 15.84 4.54	15 14 28.3 0 30.0	0.639 9155 1 2806	3 38.1
	11	2 54 11.30 5.33	15 13 57.4 0 34.2	0.638 6349	3 34.1
	12	2 54 5.97 6.12	15 13 23.2 0 37.6	0.637 3651 1 2584	3 30.1
	13	2 53 59.85 6.91	15 12 45.6 0 41.0	0.636 1067 1 2465	3 26.1
	14	2 52 52 04	+15 12 4.6	0.624.8602	3 22.0
	15	2 52 45 24	15 11 20 4	0 622 6261	3 18.0
	16	2 52 26 76	TE TO 22 8 0 47.0	0.622 4050	3 13.9
	17	9,20	15 9 42.0 0 50.8	1 - (	
	18	2 52 17 46	15 8 47.8 0 54.2	0 620 0047	
		10,01		0.628 8254	
	19	2 53 6.65 11.59	15 7 50.4 1 0.6	1 1034	3 1.6
	20	2 52 55.06 12.35	+15 6 49.8 1 3.9	0.627 6620 1 1475	2 57.5
	21	2 52 42.71 13.11	15 5 45.9 1 7.0	0.626 5145	2 53.3
	22	2 52 29.60 13.86	15 4 38.9	0.625 3833	2 49.2
	23	2 52 15.74 14.62	15 3 28.6 1 13.4	0.624 2692 1 0064	2 45.0
	24	2 52 1.12 15.35	15 2 15.2	0.623 1728	2 40.9
	25	2 51 45.77 16.08	15 0 58.7 1 19.6	0.622 0946	2 36.7
	26	2 57 20 60	+14 50 20.1	0.627.0252	2 32.5
	27	2 51 12.88	TA 58 16 5	- (	2 28.3
	28	2 50 55 25	TA 56 508 "3./	0.618 0757	2 24.0
	29	2 50 27 12	T4 55 22.T	0.617.0767	2 19.8
	30	2 50 18 10	T4 52 50.5	0.616,0001	2 15.6
Okt.	1	2 40 58 57	T4 F2 T6 0 34.5	0 616 0424 933/	2 11.3
O III O.		20,20	- 3/-4	933*	
	2	2 49 38.29 20.94	+14 50 38.6	0.615 1103 9099	2 7.0
	3	2 49 17.35 21.59	14 48 58.4 1 42.9	0.614 2004 8860	2 2.7
	4	2 48 55.76	14 47 15.5 1 45.5	0.613 3144 8616	1 58.4
	5	2 48 33.55 22.83	14 45 30.0 1 48.2	0.612 4528 8367	1 54.1
	6	2 48 10.72	14 43 41.8	0.611 6161 8113	1 49.8
	7	2 47 47.31 24.00	14 41 51.1 1 53.2	0.610 8048 7854	I 45.5
	8	2 47 22.21	-T4 20 57 0	0.610.0104	I 41.2
	9	2 46 58 76	-1 00 00 00	0 600 2605	1 36.9
	IO	2 16 22 66 23.10	14 26 42	0 608 5284	1 32.5
	II	2 46 8 24 23.02	TA 34 A.T	2 60m 8226	1 28.1
	12	2 45 45 00	TA 22 T.7	0 607 7466	1 23.8
	13	2 45 41.90 <sub>26.63</sub> 2 45 15.27	+14 29 57.2 4.5	0.606 4977	1 19.4
	-31	- 43 -31	-7 29 31-2	1771	

	Oh Welt-Zeit			Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940	h m #			
Nov. 23	2 24 2T 2T 8	+12 54 42.9	0.607 4728	22 13.2
24	2 24 4 28 20.93	T2 52 42 5	0.608 1751	22 8.8
25	2 22 27 82	12 50 44.5	0.608.0065 7314	22 4.5
26	2 22 11 87 23.93	70 40 40 0 1 33.3	0 600 6667	22 0.1
27	2 22 16 11 -3-43	TO 46 56 5 32./	0.610.4551	21 55.8
28	2 22 40.44 <sub>24.90</sub> 2 22 21.54 <sub>24.34</sub>	12 45 50.5 1 49.9 12 45 6.6 1 46.9	0.611 2713 8162	21 51.4
29	2 21 55 20	1 10 40 10 7	0 612 1147	21 47.1
30	23.76	TO AT 257	0.612.0840	21 42.8
Dez. r	2 27 10 27	70 00 710	0.612 8812	21 38.5
2	22.50	TO 08 TE 0 3/1/	0.614.8024	21 34.2
3	2 20 25.78	T2 26 42 7 3T'3	0.615 7505	21 29.9
4	2 20 4 40	70 05 77 7 1 31.44	0.616 7220 9715	21 25.6
	20.04	1 2/.0	9953	
5	2 19 43.85	$+12\ 33\ 43.7$	0.617 7173 1 0186	21 21.4
6	2 19 23.88 19.29	12 32 19.4 1 20.8	0.618 7359 1 0411	21 17.1
7	2 19 4.59 18.61	12 30 58.6	0.619 7770 1 0631	21 12.0
8	2 18 45.98 17.91	12 29 41.4	0.620 8401 1 0844	21 8.6
9	2 18 28.07	12 28 27.9	0.621 9245 1 1051	21 4.4
10	2 18 10.87 16.48	12 27 18.0 1 6.1	0.623 0296 1 1253	21 0.2
II	2 17 54.39 15.76	+12 26 11.9 1 2.3	0.624 1549 1 1449	20 56.0
12	2 17 38.63	12 25 9.6 0 58.5	0.625 2998	20 51.8
13	2 17 23.61	12 24 11.1 0 54.6	0.626 4635	20 47.7
14	2 17 9 34 13.53	12 23 16.5	0.627 6455 1 1997	20 43.5
115	2 10 55.81 12.77	12 22 25.8 0 46.7	0.628 8452	20 39.4
16	2 16 43.04 12.01	12 21 39.1 0 42.7	0.630 0619 1 2332	20 35.2
17	2 16 31.03 11.24	+12 20 56.4 0 38.8	0.631 2951 1 2492	20 31.1
18	2 16 19.79 10.47	12 20 17.6 0 34.7	0.632 5443 1 2644	20 27.0
19	2 16 9.32 9.69	12 19 42.9	0.633 8087	20 22.9
20	2 15 59.63 8.91	12 19 12.3 0 26.5	0.035 0880 1 2034	20 18.8
.21	2 15 50.72 8.13	12 18 45.8	0.030 3014 1 3070	20 14.8
22	2 15 42.59 7.33	12 18 23.3 0 18.4	0.637 6884 1 3201	20 10.7
:23	2 15 35.26 6.53	+12 18 4.9 0 14.1	0.639 0085 1 3325	20 6.7
:24	2 15 28.73	12 17 50.8 0 10.0	0.640 3410 1 2442	20 2.6
:25	2 15 23.00 4.92	12 17 40.8 0 5.8	0.641 6853 1 3555	19 58.6
26	2 15 18.08 4.12	12 17 35.0 0 1.7	0.643 0408 1 3662	19 54.6
27	2 15 13.96	12 17 33.3	0.644 4070 1 3762	19 50.6
28	2 15 10.65 2.50	12 17 35.8 0 6.7	0.645 7832 1 3856	19 46.6
29	2 15 8.15 1.68	+12 17 42.5	0.647 1688 1 3944	19 42.7
30	2 15 6.47 0.87	12 17 53.4	0.648 5632	19 38.7
31	2 15 5.60 0.06	12 18 8.5	0.649 9658	19 34.8
.32	2 15 5.54	+12 18 27.7	0.651 3760	19 30.9

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940				
Jan. o	1 34 15.27 B	+7 5 22.2	0.952 5701	18 57.1
I	1 24 16.27	7 5 16 7 24.5	0.052.2442 //4*	18 53.2
2	T 24 T7 60	7 6 127	0.054 7005 //05	18 49.3
3	T 24 TO 52	7 6 12 7	0.954 8993 7893	18 45.4
4	T 24 2T 70	7 7 15.0	0.955 6796 7820	18 41.5
5	1 34 24.46 2.67 3.09	7 7 49.3 0 34.3	0.956 4616 7833	18 37.6
6	T 24 27.55	+7 8 26.T		18 33.7
7	T 24 2T 06 3.31	7 0 5.2 0 39.1	0.058.0202	18 29.8
8	T 24 24 08	7 0 46.8	0.058 8744	18 26.0
9	I 34 30.32 4.34	7 10 20 7 +3.9	0.959 6001 7860	18 22.1
10	T 24 44 07 4-/3	40.4	0.060.2867	18 18.3
ıı	1 34 49.23 5.58	7 11 17.1 0 48.7 7 12 5.8 0 51.1	0.961 1722 7858	18 14.4
12	I 34 54.8I <sub>5.98</sub>	+7 12 56 0	0.961 9580 7852	18 10.6
13	I 35 0.79 6.40	7 13 50.3 0 53.4	0.962 7432 7845	18 6.8
14	1 35 7.19 6.80	7 14 46.0 0 58.1	0.963 5277 7835	18 2.9
15	1 35 13.99 7.21	7 15 44.1 1 0.3	0.964 3112 7822	17 59.1
16	1 35 21.20	7 16 44.4 1 2.5	0.965 0934 7807	17 55-3
17	I 35 28.80 8.01	7 17 46.9 1 4.8	0.965 8741 7791	17 51.5
18	1 35 36.81 <sub>8.41</sub>	+7 18 51.7 1 7.0	0.966 6532 7772	17 47.7
19	1 35 45.22 8.81	7 19 58.7 1 9.2	0.967 4304 7751	17 44.0
20	1 35 54.03 9.19	7 21 7.9 1 11.4	0.968 2055 7728	17 40.2
21	I 36 3.22 0.58	7 22 19.3 1 13.5	0.968 9783	17 36.4
22	1 30 12.80	7 23 32.8	0.969 7485 7675	17 32.6
23	1 36 22.76 10.35	7 24 48.5 1 17.8	0.970 5160 7645	17 28.9
24	1 36 33.11 10.73	+7 26 6.3 1 19.8	0.971 2805 7615	17 25.1
25	1 30 43.84 11,10	7 27 26.1	0.972 0420 7581	17 21.3
26	1 36 54.94 11.48	7 28 48.0 1 24.0	0.972 8001 7547	17 17.6
27	1 37 6.42	7 30 12.0 1 25.9	0.973 5548 7511	17 13.9
28	1 37 18.27 12.21	7 31 37.9 1 28.0	0.974 3059 7472	17 10.1
29	1 37 30.48 12.59	7 33 5.9 1 29.9	0.975 0531 7432	17 6.4
30	1 37 43.07 <sub>12.95</sub>	+7 34 35.8 1 31.9	0.975 7963 7390	17 2.7
31	I 37 56.02 13.30	7 36 7.7 1 33.8	0.976 5353 7347	16 59.0
Febr. I	I 38 9.32 13.67	7 37 41.5 1 35.6	0.977 2700 7302	16 55.3
2	1 38 22.99 14.03	7 39 17.1	0.978 0002 7254	16 51.6
3	I 38 37.02	7 40 54.7 1 20 "	0.978 7256 7206	16 47.9
4	1 38 51.39 14.73	7 42 34.2 1 41.2	0.979 4462 7156	16 44.2
5	1 39 6.12	+7 44 15.4	0.980 1618 7102	16 40.5
6	1 39 21.19 15.42	7 45 58.5	0.980 8721 7048	16 36.8
7	1 39 30.01 15.75	7 47 43.3 , 46.6	0.981 5769 6003	16 33.1
8	I 39 52.30 ,6 co	7 49 29.9 1 48.3	0.982 2762 6025	16 29.5
9	1 40 8.45 16.42	7 51 18.2 1 49.9	0.982 9697 6875	16 25.8
10	1 40 24.87	+7 53 8.1	0.983 6572	16 22.2

			Oh Welt-Zeit		Obere Kul
Tag		Scheinbare Scheinbare Rektaszension Deklination		log Δ	mination in Greenwich
1940					
Febr.	10	1 40 24.87 16 7F	+7 53 8.1 1 16	0.983 6572 6814	16 22.2
r.cor.	II	T 40 4T 62	7 51 50 7 31.0	0.084.2286	16 18.5
	12	T 40 58 60 1/.0/	7 54 59.7 <sub>1 53.3</sub> 7 56 53.0 <sub>1 54.8</sub>	0.085.0138 73	16 14.9
	13	T 4T T6 08 1/-39	7 58 47 8 34.0	0.085 6825	16 11.2
	14	T 4T 22 TO 17./1	8 0 44 2	2006 2445	16 7.6
	15	T 47 FT QT	8 2 42 2 1 58.0	0.087.0002	16 4.0
		10.32	1 59.4	040/	
	16	I 42 IO.I3 <sub>18.62</sub>	+8 4 41.6 2 0.9	0.987 6489 6418	16 0.
	17	1 42 28.75 18.92	8 6 42.5	0.988 2907	15 56.
	18	1 42 47.07	8 8 44.9	0.988 9254 6276	15 53.
	19	1 43 6.88 19.50	8 10 48.7 2 5.2	0.989 5530 6202	15 49.
	20	I 43 26.38 19.79	8 12 53.9 2 65	0.990 1733 6120	15 45.9
	21	1 43 46.17 20.06	8 15 0.4 2 7.8	0.990 7862 6054	15 42.
	22	1 44 6.23	+8 17 82	0.001.2016	15 38.
	23	7 44 26 55	1 0 2 9.1	0.001.0805 39/9	15 35.
	24	T 44 47 TO	8 27 27 7	0.002 5707	15 31.
	25	T 45 8 08	8 22 20 2	0.002 1621	15 27.
	26	21.15	0 05 50 5	0.002 7266 3/43	15 24.
	27	1 45 29.23 <sub>21.41</sub> 1 45 50.64 <sub>21.66</sub>	0 00 60	0.004.2022	15 20.
	28		2 15.2	3300	
		1 46 12.30 21.92	+8 30 21.4 2 16.3	0.994 8618	15 17.
März	29	1 46 34.22 22.17 1 46 56.39 22.42	8 32 37·7 <sub>2 17·4</sub> 8 34 55·1 - 8 -	0.995 4122 5421	15 13.
marz	I		2 18.5	0.995 9543 5339	15 10.
	2	1 47 18.81 22.66	2 10.5	0.996 4882 5255	15 6.
	3	I 47 41.47 22.90	8 39 33.I <sub>2 20.6</sub>	0.997 0137 5169	15 3.
	4	I 48 4.37 <sub>23.13</sub>	8 41 53.7 2 21.5	0.997 5306 5083	14 59.
	5	1 48 27.50 23.36	+8 44 15.2 2 22.5	0.998 0389 4995	14 55.
	6	1 48 50.86 23.60	8 46 37.7 2 23.4	0.998 5384 4997	14 52.
	7	1 49 14.46 23.81	8 49 1.1 2 24.3	0.999 0291 4817	14 48.
	8	1 49 38.27 <sub>24.03</sub>	8 51 25.4 2 25.2	0.999 5108 4727	14 45
	9	I 50 2.30 24.25	8 53 50.6 2 26.0	0.999 9835 4636	14 41.
	10	1 50 26.55 24.45	8 56 16.6 2 26.9	1.000 4471 4544	14 38.
	11	~ ~~ ~~	±8 €8 42 €	T 000 00TF	14 34.
	12	24.05		T 00T 2468 4453	14 31.
	13	T ET 40 EO 24.03	9 3 39.4 2 29.1	T 001 7827 +339	14 27.
	14	T 52 5 55	9 6 8.5 2 29.1	T 002 2002	14 24.
	15	T TO 00 TO 73.73	- 0 -0 - 2 -9.0	6 - 6 - 41/2	14 20.
	16	T 52 56 20		1.002 0205 4077	14 17.
	17	T F2 2T 80	- 3	T 002 4222	14 13.
	18	I 53 21.80 25.78	+9 13 39.7 2 31.6	T 000 8008 3003	
		1 53 47.58 25.94	9 16 11.3 2 32.2	T 004 T007 3/-7	14 10.
	19	1 54 13.52 26.11	9 18 43.5 2 32.7	T 004 5680 3092	14 3
	20	I 54 39.63 26.27	9 21 16.2 2 33.2	T 004 0084 3393	13 59
	21	1 55 5.90 <sub>26.43</sub>	9 23 49.4 2 33.7	1.004 9284 3498	
	22	1 55 32.33	+9 20 23.1	1 1.005 2/02	13 56

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940				OUNDED.
März 22	I 55 32.33 26.50	+ 9 26 23.1 2 34.2	1.005 2782	13 56.1
23		9 28 57.3 2 34.2	T 005 6182 3401	13 52.6
24	7 56 25 65	0 41 47 0	T 005 0487 3304	13 49.1
25	T F6 52 52	0 04 60 " 33.0	T.006 2602	13 45.7
26	T 57 TO 55	0 06 40 0 - 33.3	T 006 5700 310/	13 42.2
27	1 57 46.71 <sub>27.29</sub>	9 30 42.2 2 35.8 9 39 18.0 2 36.0	1.006 8807 3008	13 38.7
28	1 58 14.00	+ 0 AT 54 0	1.007 1716 2809	13 35.2
29	T ES AT 42 -/-+3	9 44 30.4 2 36.4	T.007 4525	13 31.7
30	1 59 8.98 27.55 1 59 8.98	9 47 7.1 2 36.9	1.007 7234 2609	13 28.3
31	I 59 36.66 27.80	0 40 44 0 2 30.9	T 007 0842	13 24.8
April 1	2 0 1 16	4 3/.1	1.008 2352 2309	13 21.3
2	2 0 32.37 28.02	9 52 21.1 <sub>2 37.3</sub> 9 54 58.4 <sub>2 37.5</sub>	1.008 4759 2306	13 17.9
3	2 1 0.39 28.13	1 0 55 05 0	T 008 7065	13 14.4
4	2 1 28.52 28.23	TO 0 TO 5	T.008 0270	13 10.9
5	2 1 56.75 28.33	TO 0 57 0 " 3/ 1/	T.000 T272	13 7.5
6	2 2 25.08 28.42	TO # 20 T 237.9	1.009 3370 1895	13 4.0
7	2 2 53.50 28.51	10 8 70 2 3/.9	T 000 5265	13 0.5
8	2 3 22.01 28.60	10 10 44.9 2 37.9	1.009 7057 1687	12 57.1
9	2 3 50.61 28.67	+10 13 22.9 2 37.9	1.009 8744	12 53.6
10	2 4 19.28	10 10 0.8 2 27 0	1.010 0328	12 50.2
II	2 4 48.03 28 82	10 10 30.7 2 37.0	1.010 1809 1377	12 46.7
12	2 5 16.85 28.89	10 21 10.0	1.010 3186	12 43.3
13	2 5 45.74 28 05	10 23 54.3 2 27 6	1.010 4460	12 39.8
14	2 6 14.69 29.00	10 26 31.9 2 37.5	1.010 5630 1066	12 36.4
15	2 6 43.69 29.05	+10 29 9.4 2 37.3	1.010 6696 961	12 32.9
16	2 7 12.74 20 10	10 31 40.7 2 37.1	1.010 7657 857	12 29.5
17	2 7 41.84	10 34 23.8 2 36.9	1.010 8514 754	12 26.0
18	2 8 10.99	10 37 0.7 2 36.7	1.010 9268 650	12 22.6
19	2 8 40.18 20,22	10 39 37.4 2 36.4	1.010 9918	12 19.1
20	2 9 9.40 29.25	10 42 13.8 2 36.2	1.011 0466	12 15.7
21	2 9 38.65 29.29	+10 44 50.0 2 35.8	1.011 0910 342	12 12.2
22	2 10 7.94 29.31	10 47 25.8 2 35.5	1.011 1252	12 8.8
23	2 10 37.25 29.32	10 50 1.3 2 35.1	1.011 1491 136	12 5.4
24	2 11 0.57 20 25	10 52 30.4 2 34.8	1.011 1627 34	12 1.9
25	2 11 35.92 29.36	10 55 11.2	1.011 1661 70	11 58.4
26	2 12 5.28 29.37	10 5/ 45.0 2 34.0	1.011 1591 174	11 55.0
27	2 12 34.65 29.37	+11 0 19.6	1.011 1417 278	11 51.6
28	2 13 4.02 20 28	11 2 53.1 2 33.1	1.011 1139 381	11 48.1
29	2 13 33.40 29.37	11 5 20.2 2 22 7	1.011 0758 484	11 44.7
30	2 14 2.77 29.37	11 7 58.9 2 32.1	1.011 0274 587	11 41.2
Mai 1	2 14 32.14 29.37	11 10 31.0	1.010 9687 689	11 37.8
2	2 15 1.51	+11 13 2.6	1.010 8998	11 34.3

000 page 1		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940	14. 14. 14.			
Mai 2	2 15 I.51 20 24	+11 13 2.6 2 21	1.010 8998	11 34.3
3	2 15 30.85	TT 15 22.7	1 010 8206	11 30.0
4	2 16 0.18 29.33	11 18 42	1.010 7211	11 27.4
5	2 16 29.49 29.31	II 20 24.2	1.010 6313 998	11 24.0
6	2 16 58.77	II 23 3.5 2 29.3	1.010 5212	11 20.0
7	2 17 28.01 29.24	11 25 32.2 2 28.1	1.010 4008	11 17.
8	2 17 57.22 29.17	+11 28 0.3 2 27.4	1.010 2702 1409	11 13.0
9	2 18 26.39 29.12	11 30 27.7 2 26.7	1.010 1293	11 10.
10	2 18 55.51 29.07	IT 32 54.4 2 26.1	1.009 9782 1613	11 6.8
ΙΙ	2 19 24.58 29.01	11 35 20.5 2 25.3	1.009 8169 1714	11 3.
12	2 19 53.59 28.96	11 37 45.8 2 24.5	1.009 6455 1815	10 59.0
13	2 20 22.55 28.89	11 40 10.3 2 23.7	1.009 4640	10 56.4
14	2 20 51.44 28.83	+11 42 34.0 2 22.9	1.009 2726 2015	10 53.0
15	2 21 20.27 28.75	II 44 56.9 2 22.1	1.009 0711	10 49.
16	2 21 49.02 28.68	II 47 19.0 2 21.3	1.008 8597 2213	10 46.0
17	2 22 17.70 28.60	11 49 40.3 2 20.5	1.008 6384	10 42.0
18	2 22 46.30 28.52	11 52 0.8 2 19.6	1.008 4072 2410	10 39.1
19	2 23 14.82 28.43	11 54 20.4 2 18.8	1.008 1662 2508	10 35.
20	2 23 43.25 28.34	+11 56 39.2 2 17.8	1.007 9154 2606	10 32.2
21	2 24 11.59 28.24	11 58 57.0 2 16.9	1.007 6548 2702	10 28.
22	2 24 39.83 28.14	12 1 13.9 2 16.0	1.007 3846 2799	10 25.
23	2 25 7.97 28.05	12 3 29.9 2 15.0	1.007 1047 2896	10 21.
24	2 25 36.02 27.94	12 5 44.9 2 14.1	1.006 8151 2992	10 18.
25	2 26 3.96 27.83	12 7 59.0 2 13.1	1.006 5159 3087	10 14.9
26	2 26 31.79 27.72	+12 10 12.1	1.006 2072 3183	10 11.
27	2 26 59.51 27.60	12 12 24.2 2 11,1	1.005 8889 3277	10 7.
28	2 27 27.11 27.47	12 14 35.3 2 10.1	1.005 5612 3373	10 4.
29	2 27 54.58 27.36	12 16 45.4 2 9.0	1.005 2239 3468	10 1.0
30	2 28 21.94 27.22	12 18 54.4 2 8.0	1.004 8771 3562	9 57-
31	2 28 49.16 27.09	12 21 2.4 2 6.9	1.004 5209 3655	9 54.0
Juni 1	2 29 16.25 26.95	+12 23 9.3 2 5.7	1.004 1554 3748	9 50.
2	2 29 43.20 26 80	12 25 15.0 2 4.7	1.003 7806 3841	9 47.0
3	2 30 10.00 26.65	12 27 19.7 2 3.5	1.003 3965 3933	9 43.0
4	2 30 36.65 26.51	12 29 23.2	1.003 0032	9 40.
5	2 31 3.16 26 24	12 31 25.6	1.002 6008 4115	9 36.6
6	2 31 29.50 26.19	12 33 26.9 2 0.0	1.002 1893 4206	9 33-1
7	2 31 55.69 26.02	+12 35 26.9 1 58.8	1.001 7687 4296	9 29.6
8	2 32 21.71 25 85	12 37 25.7	1.001 3391 4384	9 26.1
- 9	2 32 47.50 25 68	12 39 23.4 r 56.3	1.000 9007	9 22.0
10	2 33 13.24 25 40	12 41 19.7 1 55.1	1.000 4534 4561	9 19.1
11	<sup>2</sup> 33 38.73 <sub>25.31</sub>	12 43 14.8	0.999 9973 4647	9 15.6
12	2 34 4.04	+12 45 8.7	0.999 5326	9 12.0

			Oh Welt-Zeit		Obere K
Tag		Scheinbare Rektaszension	Scheinbare Deklination	log Δ	minati in Greenw
194	0				510
Juni	12	2 34 4.04 25 12	+12 45 8.7 1 52 6	0.999 5326	0 12.
	13	2 34 29.16	T2 47 T2	0.000.0502 4/33	9 8.
	14	2 24 54.00	T2 48 F2 6 1 51.3	0.008 5776	9 5.
	15	2 35 18.82	TO TO 40 6	0.008.0875	9 1.
	16	2 35 43.36 24.54	TO 50 07 0	0.007 F801 +904	8 57.
	17	2 36 7.69 24.33	T2 54 T8 5 4/·3	0.007.0825	8 54.
	1	24.13	1 40.0	3,40	1
	18	2 36 31.82 23.91	+12 56 4.5 1 44.7	0.996 5677 5228	8 50.
	19	2 36 55.73 23.70	12 57 49.2 1 43.3	0.996 0449 5309	8 47.
	20	2 37 19.43 23.48	12 59 32.5 1 41.9	0.995 5140 5388	8 43.
	21	2 37 42.91 23.26	13 1 14.4 1 40.5	0.994 9752 5467	8 40.
	22	2 38 6.17	13 2 54.9 1 39.1	0.994 4285	8 36.
	23	2 38 29.21 22.81	13 4 34.0 1 37.7	0.993 8740 5623	8 33.
	24	2 28 52 02	+12 6 117	0.002.2117	8 29.
	25		12 7 47 0	0.002 7410	8 26.
	26	2 20 26 04 24.34	12 0 22 7	0.002 1645 3//4	8 22.
	27		13 10 56.1 1 33.4	0.991 5796 5849	8 18.
	28	2 40 20 80	13 12 28.0 1 31.9	0.990 9873 5923	8 15.
	29	2 40 42 40	1 30,4	0.990 3876 5997	8 11.
		21.34	13 13 58.4 1 28.9	0009	
	30	2 41 3.83 21.08	+13 15 27.3 1 27.4	0.989 7807 6140	8 8.
Juli	I	2 41 24.91 20.82	13 16 54.7	0.989 1667 6310	8 4.
	2	2 41 45.73 20.56	13 18 20.6	0.988 5457 6380	8 1.
	3	2 42 6.29 20 28	13 19 44.9 1 22.8	0.987 9177 6247	7 57
	4	2 42 26.57	13 21 7.7 1 21.2	0.987 2830	7 53
	5	2 42 46.57 19.72	13 22 28.9 1 19.6	0.986 6416 6479	7 50.
	6	2 42 6 20	±12 22 48 5	0.00 # 000#	7 46.
	7	19.43	12 25 66	0	7 43
	8	2 42 44 86 19.14	13 26 23.0	0.084.6787	7 39
	9	10.03	13 27 37.9	0.084.0177	7 35
	10	10.55	13 28 51.2	0.082.2288	7 32.
	11	2 44 40 70	13 30 2.8	0 (( "/"	7 28.
		*/-94	1 10,0	0045	
	12	2 44 58.44 17.63	+13 31 12.8 1 8.3	0.981 9755 <sub>6901</sub>	7 24.
	13	2 45 16.07	13 32 21.1 1 6.6	0.981 2854 6056	7 21.
	14	2 45 33·39 <sub>17.01</sub>	13 33 27.7 <sub>1 5.0</sub>	0.980 5898	7 17.
	15	2 45 50.40 16.68	13 34 32.7	0.979 8889 7061	7 14.
	16	2 46 7.08	13 35 36.1	0.979 1828 7112	7 10.
	17	2 46 23.45 16.04	13 36 37.7 <sub>1 0.0</sub>	0.978 4716 7161	7 6.
	18	2 46 39.49 15.71	1 7 2 2 7 7	0.077.7555	7 3.
	19		70 -6 -	0.077.0246	6 59.
	20	2 47 10 58	13 30 30.0 0 56.6	0.076.2001	6 55.
	21	2 47 10.50 15.05	13 39 32.6 0 54.9	0.075 5700	6 51.
	22	2 47 25.63 14.70	13 40 27.5 ° 53.1	0.074 8445 /373	6 48.
		2 47 40.33 14.37	13 41 20.6 0 51.4 +13 42 12.0	0.974 0445 7388	6 44.
	23	2 47 54.70	1 13 42 12.0	0.9/4 1957	1 9 44

			Oh Welt-Zeit		Obere Kul
Tag	5	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
1940	0				
Juli	23	2 47 54.70 8	+13 42 12.0	0.974 1057 7430	6 44.5
	24	2 48 8 71	12 42 17 49./	0.073 3627	6 40.8
	25	2 48 22.38	T2 42 40 7	0.072 6157	6 37.1
	26	2 48 25 70	12 44 35.0	0.071 8648	6 33.4
	27	2 48 48 66	T2 45 20.2	0.071 1102 /343	6 29.7
	28	2 49 1.25 12.23	13 46 3.0 42.7	0.970 3523 7580	6 26.0
	29	2 49 13.48 11.87	+13 46 43.9 39.2	0.969 5910 7645	6 22.3
	30	2 49 25.35 11.40	13 47 23.1 27.2	0.968 8265 7675	6 18.5
	31	2 49 36.84 11.12	13 48 0.4 25.5	0.968 0590	6 14.8
Aug.	I	2 49 47.96	13 48 35.9 33.8	0.967 2887 7729	6 11.0
	2	2 49 58.70 10.36	13 49 9.7 31.9	0.966 5158	6 7.3
	3	2 50 9.06 9.98	13 49 41.6 30,1	0.965 7404 7775	6 3.5
	4	2 50 19.04 9.59	+13 50 11.7 28.3	0.964 9629 7796	5 59-7
	5	2 50 28.63 9.19	13 50 40.0 26.5	0.964 1833 7814	5 56.0
	6	2 50 37.82 8.81	13 51 6.5 24.6	0.963 4019 7831	5 52.2
	7	2 50 46.63 8.41	13 51 31.1 22.8	0.962 6188 7844	5 48.4
	8	2 50 55.04 8.or	13 51 53.9 21.0	0.961 8344 7855	5 44.6
	9	2 51 3.05 7.61	13 52 14.9 19.1	0.961 0489 7865	5 40.8
	10	2 51 10.66	+13 52 34.0 17.3	0.960 2624 7873	5 37.0
	II	2 51 17.87 6.81	13 52 51.3 15.5	0.959 4751 7878	5 33.2
	12	2 51 24.68 6.41	13 53 6.8 13.6	0.958 6873 7882	5 29.4
	13	2 51 31.09 6.01	13 53 20.4 11.8	0.957 8991 7882	5 25.5
	14	2 51 37.10 5.60	13 53 32.2 9.9	0.957 1109 7882	5 21.7
	15	2 51 42.70 5.20	13 53 42.1 8.1	0.956 3227 7879	5 17.9
	16	2 51 47.90 4.78	+13 53 50.2 6.3	0.955 5348 7874	5 14.0
	17	2 51 52.68	13 53 56.5	0.954 7474 7868	5 10.2
	18	2 51 57.05 3.96	13 54 0.9 2.6	0.953 9606 7858	5 6.3
	19	2 52 1.01	13 54 3.5 o.8	0.953 1748 7848	5 2.4
	20	2 52 4.56 3.14	13 54 4.3	0.952 3900 7835	4 58.6
	21	2 52 7.70 2.72	13 54 3.2 2,8	0.951 6065 7819	4 54.7
	22	2 52 10.42 2.30	+13 54 0.4 4.7	0.950 8246 7801	4 50.8
	23	2 52 12.72 1.89	13 53 55·7 <sub>6.5</sub>	0.950 0445 7781	4 46.9
	24	2 52 14.61	13 53 49.2 8.4	0.949 2664 7758	4 43.0
	25	2 52 16.07	13 53 40.8	0.948 4906 7733	4 39.1
	26	2 52 17.11 0.62	13 53 30.6 12.0	0.947 7173 7706	4 35.2
	27	2 52 17.73 0.20	13 53 18.6 13.9	0.946 9467 7676	4 31-3
	28	2 52 17.93 0.22	+13 53 4.7 15.7	0.946 1791 7644	4 27.3
	29	2 52 17.71 0.64	13 52 49.0	0.945 4147 7609	4 23.4
	30	2 52 17.07 1.06	13 52 31.6	0.944 6538 7572	4 19.5
2024	31	2 52 16.01	13 52 12.3 21.1	0.943 8966 7531	4 15.5
Sept.	I	2 52 14.52 1.91	13 51 51.2 22.9	0.943 1435 7488	4 11.5
	2	2 52 12.61	+13 51 28.3	0.942 3947	4 7.6

		On Welt-Zeit		Obere Kul-	
Tag	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich	
1940	h m #			h m	
Sept. 2	2 52 12.61 2.33	+13 51 28.3 0 24.6	0.942 3947 7442	4 7.6	
3	2 52 10.28 2.76	13 51 3.7 0 26.5	0.941 6505 7394	4 3.6	
4	2 52 7.52 3.17	13 50 37.2 0 28.2	0.940 9111	3 59.6	
5	2 52 4.35 3.58	13 50 9.0 0 29.9	0.940 1769 7288	3 55.6	
6	2 52 0.77	13 49 39.1 0 31.6	0.939 4481	3 51.6	
7	2 51 56.77 4.41	13 49 7.5 ° 33.4	0.938 7250 7172	3 47.6	
8	2 57 52 26	1 70 49 04 7	0.028.0078	3 43.6	
9	2 55 47 54	35.1	0.027.2060	3 39.6	
10	0 57 40 07 3.23	30.0	0.006 5004	3 35.6	
II	( (0 5.03	T2 46 42 7 30.5	0.025 8046	3 31.6	
12	0.03	6 - 6 - 40.1	0.005.0008	3 27.5	
13	2 57 24 27	41./	0.024 5202	3 23.5	
	0,02	43.4	0		
14	2 51 17.39 7.22	+13 44 38.5 0 45.0	0.933 8440 6685	3 19.4	
15	2 51 10.17 7.61	13 43 53.5 ° 46.6	0.933 1755 6606	3 15.4	
16	2 51 2.56 8.00	13 43 6.9 0 48.2	0.932 5149 6524	3 11.4	
17 18	2 50 54.56 8.38 2 50 46.18 8.76	13 42 18.7 · 49.8	0.931 8625 6439	3 7.3	
	- 0.70	13 41 28.9 ° 51.3	0.931 2186 6353	3 3.2	
19	2 50 37.42 9.13	13 40 37.6 0 52.8	0.930 5833 6262	2 59.1	
20	2 50 28.29 9.51	+13 39 44.8 0 54.3	0.929 9571 6171	2 55.0	
21	2 50 18.78	13 38 50.5 0 55.8	0.929 3400 6076	2 50.9	
22	2 50 8.91	13 37 54.7 0 57.2	0.928 7324	2 46.9	
23	2 49 58.66	13 36 57 5 0 58.7	0.928 1346	2 42.8	
24	2 49 48.06 10.96	13 35 58.8	0.927 5467	2 38.6	
25	2 49 37.10 11.31	13 34 58.8	0.926 9691 5672	2 34.5	
26	2 49 25.79 11.65	-+12 22 57.3	0.026.4010	2 30.4	
27	2 40 14 14	13 32 54.4	0.025 8454 3303	2 26.3	
28	2 40 2 14	12 21 50.2	0.025 3000 3434	2 22.2	
29	2 48 40 80	T2 20 44 7 3.3	0.024.7650 3341	2 18.0	
30	2 48 27.14	72 20 29 2	0.024.2422	2 13.9	
Okt. I	2 48 24 15 77	13 28 20.0	0.923 7326 4986	2 9.7	
2	2 48 10.84	1 9.2	0.000.0040	2 5.6	
		+13 27 20.7 1 10.5 13 26 10.2 11.5	0.923 2340 4863	2 1.4	
3		13 24 58.7 1 12.7	0.922 7477 4738 0.922 2739 4610		
4	2 47 43.32 14.21	T2 22 46 0	0	0.0	
5 6	2 47 29.11 14.49 2 47 14.62 14.76	13 23 46.0 1 13.8	0.921 8129 4481	I 53.I I 48.9	
	2 47 14.02 14.76	13 22 32.2 1 14.8	0.921 3040 4349	1 44.7	
7	2 46 59.86	13 21 17.4 1 15.8	0.920 9299 4215		
8	2 46 44.82	+13 20 1.6	0.920 5084 4079	1 40.6	
9	2 40 29.52	13 18 44.8	0.920 1005	1 36.4	
10	2 40 13.97 18 80	13 17 27.1	0.919 7004 3803	1 32.2	
11	2 45 50.17 16.04	13 16 8.5	0.919 3261 3661	1 28.0	
12	2 45 42.13 16.26	13 14 49.1	0.918 9600 2518	1 23.8	
13	2 45 25.87	+13 13 28.8	0.918 6082	1 19.6	

		Oh Welt-Zeit		Obere Kul-
Tag	Scheinbare Rektaszension	Scheinbare Deklina <b>ti</b> on	log Δ	mination in Greenwich
1940				-2
Okt. 13	2 45 25.87 16.48	+13 13 28.8 1 21.0	0.918 6082	1 19.6
14	2 45 9·39 16.48 2 45 9·39 16.69	13 12 7.8 1 21.8	0.918 2708 3374	1 15.4
15	2 44 52.70 16.90	13 10 46.0 1 22.4	0.917 9479 3081	1 11.2
16	2 44 35.80 17.09	13 9 23.6 1 23.1	0.917 6398 2933	1 7.0
17	2 44 18.71 17.28	13 8 0.5 1 23.7	0.917 3465 2782	1 2.7
18	2 44 1.43 17.45	13 6 36.8 1 24.3	0.917 0683 2630	0 58.5
19	2 43 43.98 17.62	+13 5 12.5 <sub>1 24.8</sub>	0.916 8053 2478	0 54.3
20	2 43 26.36	13 3 47.7 <sub>1 25 2</sub>	0.916 5575	0 50.1
21	2 43 8.58 17.93	13 2 22.5 1 25.7	0.916 3252 2167	0 45.9
22	2 42 50.65 18.07	13 0 56.8 1 26.1	0.916 1085 2009	0 41.6
23	2 42 32.58 18.21	12 59 30.7 1 26 5	0.915 9076 1852	0 37.4
24	2 42 14.37 18.32	12 58 4.2 1 26.7	0.915 7224 1691	0 33.2
25	2 41 56.05 18.43	+12 56 37.5 1 27.0	0.915 5533 1531	0 28.9
26	2 41 37.62 18.53	12 55 10.5 1 27.2	0.915 4002 1360	0 24.7
27	2 41 19.09 18.62	12 53 43 3 <sub>1 27.3</sub>	0.915 2633 1206	0 20.5
28	2 4I 0.47 <sub>18.70</sub>	12 52 16.0	0.915 1427 1042	0 16.2
29	2 40 41.77 18.77	12 50 48.6 1 27.6	0.915 0385 877	0 12.0
30	2 40 23.00 18.83	12 49 21.0 1 27.5	0.914 9508 713	0 7.7
31	2 40 4.17 18.87	+12 47 53.5 1 27.4	0.914 8795	0 3.5 23 59.2
Nov. 1	2 39 45.30 18.90	12 46 26.1	0.914 8248 281	23 55.0
2	2 39 26.40 18.93	12 44 58.7 1 27.2	0.914 7867 215	23 50.7
3	2 39 7.47 18.94	12 43 31.5 <sub>1 27.0</sub>	0.914 7652 49	23 46.5
4	2 38 48.53 18.94	12 42 4.5 1 26.7	0.914 7603 117	23 42.2
5	2 38 29.59 18.93	12 40 37.8 1 26.4	0.914 7720 283	23 38.0
6	2 38 10.66 18.90	+12 39 11.4 1 26.0	0.914 8003 449	23 33.8
7	2 37 51.70 18.88	12 37 45.4 1 25.7	0.914 8452 615	23 29.5
8	2 37 32.88 18.83	12 36 19.7	0.914 9067 779	23 25.3
9	2 37 14.05 18.78	12 34 54.6	0.914 9846 945	23 21.0
11	2 36 55.27 18.72 2 36 36.55	12 33 29.9 1 24.1	0.915 0791 1108 0.915 1899 1272	23 16.8
	0 0 00 18,64	12 32 5.8 1 23.5	12/2	
12	2 36 17.91 18.56	+12 30 42.3 1 22.8	0.915 3171 1434	23 8.3
13	2 35 59 35 18.46	12 29 19.5 1 22.1	0.915 4605 1596	23 4.1
14	2 35 40.89 18.36	12 27 57.4 1 21.4	0.915 6201 1758	22 59.8
15 16	2 35 22.53 18.25	12 26 36.0	0.915 7959 1917	22 55.6
17	2 35 4.28 18.13 2 34 46.15 17.00	12 25 15.5 1 19.7 12 23 55.8 1 18.8	0.915 9876 <sub>2078</sub> 0.916 1954 <sub>2236</sub>	22 51.4 22 47.1
- /	1/.99		3-	
10	2 34 28.16 17.85	+12 22 37.0	0.916 4190 2393	22 42.9
19	2 34 10.31 17.69	12 21 19.1 1 16.9	0.916 6583 2550	22 38.7
20	2 33 52.62	12 20 2.2 1 15.8	0.916 9133 2706	22 34.5
21	2 33 35.08 17.36	12 18 46.4 1 14.7	0.917 1839 2860	22 30.2
22	2 33 17.72 17.18	12 17 31.7 1 13.7 +12 16 18.0	0.917 4699 3014	22 21.8
23	2 33 0.54		0.917 7713	22 21.0

			Oh Welt-Zeit		Obere Kul
Tag		Scheinbare Rektaszension	Scheinbare Deklination	log $\Delta$	mination in Greenwich
194	0	h m *			h m
Nov.	23	2 33 0.54 17.00	+12 16 18.0 72.4	0.917 7713 3166	22 21.8
	24	2 32 43.54 16.79	12 15 5.6 71.3	0.918 0879 2216	22 17.6
	25	2 32 26.75 16.58	12 13 54.3 69.9	0.918 4195 3466	22 13.4
	26	2 32 10.17 16.37	12 12 44.4 68.7	0.918 7661 3614	22 9.2
	27	2 31 53.80 16.13	12 11 35.7 67.3	0.010 1275	22 5.0
	28	2 31 37.67 15.90	12 10 28.4 66.0	0.919 5035 3760	22 0.8
	29	2 31 21.77 15.64	+12 9 22.4 64.5	0.919 8939 4047	21 56.6
	30	2 31 6.13 15.39	12 8 17.9 63.0	0.920 2986 4188	21 52.4
Dez.	1	2 30 50.74 15.12	12 7 14.9 61.4	0.920 7174 4325	21 48.2
	2	2 30 35.62 14.85	12 6 13.5 59.9	0.921 1499 4461	21 44.1
	3	2 30 20.77 14.56	12 5 13.6 58.3	0.921 5960	21 39.9
	4	2 30 6.21 14.28	12 4 15.3 56.7	0.922 0555 4726	21 35.7
	5	2 29 51.93	+12 3 18.6	0.922 5281 4855	21 31.6
	6	2 29 37.96 13.97	12 2 23.6 33.0	0.923 0136 4981	21 27.4
	7	2 29 24.29 13.35	12 1 30.3 53.3	0.923 5117 5106	21 23.2
	8	2 29 10.94 13.04	12 0 38.7 49.8	0.924 0223 5226	21 19.1
	9	2 28 57.90 12.71	11 59 48.9 48.1	0.924 5449 5346	21 14.9
	10	2 28 45.19 12.38	11 59 0.8 46.2	0.925 0795 5463	21 10.8
	II	2 28 32.81	+11 58 14.6	0.925 6258 5576	21 6.7
	12	2 28 20.77	11 57 30.3 42.4	0.926 1834 688	21 2.6
	13	2 28 9.07 11.36	11 56 47.9 40.6	0.926 7522	20 58.4
	14	2 27 57.71 10.99	11 56 7.3 38.6	0.927 3319 5904	20 54.3
	15	2 27 46.72 10.64	11 55 28.7 36.6	0.927 9223 6008	20 50.2
	16	2 27 36.08 10.27	11 54 52.1 34.8	0.928 5231 6109	20 46.1
	17	2 27 25.81 9.91	+11 54 17.3 32.7	0.929 1340 6208	20 42.0
	18	2 27 15.90 9.53	11 53 44.6 30.7	0.929 7548 6305	20 37.9
	19	2 27 6.37 0.15	11 53 13.9 28.7	0.930 3853 6300	20 33.8
	20	2 26 57.22 8 77	II 52 45.2 <sub>26.6</sub>	0.931 0252 6490	20 29.8
	21	2 20 48.45 8 20	11 52 18.6 24.6	0.931 0742 6578	20 25.7
	22	2 26 40.06 7.99	11 51 54.0 22.5	0.932 3320 6665	20 21.6
	23	2 26 32.07 7.59	+11 51 31.5 20.3	0.932 9985 6749	20 17.6
	24	2 20 24.48	11 51 11.2 18.2	0.933 6734 6829	20 13.5
	25	2 26 17.29 6.78	11 50 53.0 16.2	0.934 3563 6907	20 9.5
	26	2 26 10.51 6.38	11 50 36.8 13.9	0.935 0470 6982	20 5.4
	27	2 26 4.13 5.06	11 50 22.9 11.8	0.935 7452 7055	20 1.4
	28	2 25 58.17 5.54	11 50 11.1 9.6	0.936 4507 7124	19 57-4
	29	2 25 52.63 5.13	+11 50 1.5 7.5	0.937 1631 7191	19 53.3
	30	2 25 47.50 4.70	11 49 54.0	0.937 8822 7253	19 49-3
	31	2 25 42.80	11 49 48.7	0.938 0075 7314	19 45-3
	32	2 25 38.52	+11 49 45.7	0.939 3389	19 41.3

			Oh Welt-Zeit		Obere Kul-	
Tag	Š	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich	
1940	0					
Jan,	0	3 3 39.94 20.15	+16 58 24.2 1 17.8	1.277 9806	20 26.I	
	4	7 10 70	57 6.4	270 2161	20 10.1	
	8	3 2.63 14.03	56 1.1	280 5145 1 2984 280 5145 1 3532	19 54.1	
	12	2 48.60 10.81	55 8.8 0 39.0	281 8677	19 38.2	
	16	2 37.79 7.53	54 29.8 0 25.3	283 2678	19 22.2	
	20	3 2 30.26 4.18	$+16\ 54\ 4.5\ 0.11.2$	1.284 7065	19 6.4	
	24	2 26.08 0.82	53 53.3 0 2.7	286 1757 1 4028	18 50.6	
	28	2 25.26	53 56.0 0 16.8	287 6685 1 5082	18 34.9	
Febr.	1	2 27.83 5.96	54 12.8 0 31.0	289 1767 1 5167	18 19.2	
	5	<sup>2</sup> 33.79 <sub>9.35</sub>	54 43.8 0 45.0	290 6934 1 5171	18 3.6	
	9	3 2 43.14 12.72	+16 55 28.8 0 58.9	1.292 2105 1 5099	17 48.0	
	13	2 55.86 16.03	56 27.7 1 12.4	293 7204 1 4951	17 32.5	
	17	3 11.89 19.25	57 40.1 1 25.6	295 2155 1 4733	17 17.1	
	21	3 31.14 22.40	+16 59 5.7 1 38.4	296 6888	17 1.7	
	25	3 53.54 25.45	+17 0 44.1 1 50.6	298 1337 1 4113	16 46.3	
März	29	3 4 18.99 28.41	+17 2 34.7 2 2.4	1.299 5450 1 3713	16 31.0	
Marz	4 8	4 47.40 31.28 5 18.68	4 37.1 2 13.8 6 50.0	300 9163 1 3256	16 15.8 16 0.6	
	12	34.04	2 24.4	302 2419 1 2738		
	16	5 52.72 36.64 6 29.36 30.00	9 15.3 2 34.5 11 49.8 2 42.8	303 5157 1 2172 304 7329 1 1554	15 45.4	
	20	2 7 8 45 39.09	+T7 T4 226 2 43.0	T 205 8882 1 233T	15 30.3	
	24	7 40.85	17 25.0	206.0782	15 0.2	
	28	8 22 40 43.55	20 26.2	207.0080	14 45.2	
April	1	0. 18.07	23 22.6 3 7.4	208 0475	14 30.2	
P	5	10 641	26 47.5	200 8200	14 15.3	
	9	2 10 55 55 49.14	+17 20 7.0 3 19.3	T 210 6121 7931	14 0.4	
	13	TT 46 22	33 31.6 3 24.6	311 3241 6263	13 45-5	
	17	T2 28 24	37 0.3 3 32.1	311 9504 5407	13 30.7	
	21	13 31.43 54.17	40 32.4	312 4911 4537	13 15.8	
	25	14 25.60 55.03	44 7.1 3 34.7	312 9448 4537	13 1.0	
	29	3 15 20.63 55.69	$+17$ 47 43.8 $\frac{3}{3}$ 37.9	1.313 3103 2757	12 46.2	
Mai	3	16 16.32 56.19	51 21.7 3 38.4	313 5860 1851	12 31.4	
	7	17 12.51 56.52	55 0.1 2 28 2	313 7711	12 16.6	
	11	18 9.03 =6.62	+17 58 38.3 3 37.3	313 8651 27	12 1.8	
	15	19 5.66 56.56	+18 2 15.6	313 8678 880	11 47.0	
	19	3 20 2.22 56.35	+18 5 51.4 3 33.4	1.313 7798	11 32.2	
	23	20 58.57	9 24.8 3 30.6	313 6019 2667	11 17.4	
	27	21 54.53 55.40	12 55.4 2 27 2	313 3352 3555	11 2.6	
Taxon !	31	22 49.93 54.68	10 22.0 3 23.2	312 9797 4428	10 47.8	
Juni	4	23 44.61 53.79	19 45.8 3 18.5	312 5369 5289	10 33.0	
	8	3 24 38.40 52.68	+18 23 4.3 3 13.4	1.312 0080 6136	10 18.1	
	16	25 31.08 51.45	26 17.7 3 7.6	311 3944 <sub>6948</sub>	10 3.3	
		26 22.53 50.02	29 25.3 3 1.3 32 26.6 3 54.6	310 6996 309 9256 8507	9 48.4	
	20	27 12.55 48.48 28 1.03 46	34.0	200.0751	9 33·5 9 18.6	
	24 28	28 1.03 46.77 28 47.80	35 21.2 2 47.5 38 8.7 2 20.8	308 1506 9245	9 3.6	
Juli	2	3 29 32.71	+18 40 48.5	1.307 1547 9959	8 48.6	

			Oh Welt-Zeit		Obere Kul-
Tag	5	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
194	0				
Juli	2	3 29 32.71 s	+18 40 48.5 2 21.0	1.307 1547	8 48.6
	6	20 I5-FO	40.00 4 - 37	206 0010	8 33.6
	10	20 56 20	45 40 5 2 23.3	204 0622	8 18.6
	14	21 24.60 30.39	47 58.2 4.4.3	202 7755	8 3.5
	18	32 10.62 33.93	FO 24 - 3	202 5221	7 48.3
	22	2 22 44.OT 33-39	1 18 FT FO T 33./	T 207 2206 1 2933	7 33.1
	26	22 TA.72	E2 450 + 13.9	200 8000 * 339/	7 17.9
	30	22 42 64	55 20.8	208 5185 1 3014	7 2.7
Aug.	3	24 7 67 23.03	56 46.1	207 1008 141//	6 47.4
	7	24 20 6=	58 0.8 14.7	205 6522	6 32.0
	II	2 24 48 57	+18 50 4.7	T 204 T705 14/2/	6 16.6
	15	-3./3	1 -0	202 6880	6 1.1
	19	25 16.86	1 +TO 0 20 2	201 1866	5 45.6
	23	25 26 16 9.30	T 0.7	280 6784 1 5082	5 30.0
	27	35 32.16 6.00 2.67	T 28 0	288 1708	5 14.4
	31	2 25 24 92	+10 1 26.8	T 286 6707	4 58.7
Sept.	4	25 24 16	T 22 2 3.0	285 1855 14052	4 42.9
	8		т т8 2	282 7220	4 27.2
	12	25 22 88	0 52.2	282 2001	4 11.3
	16	35 12.37 <sub>13.66</sub>	+10 0 15.2	280 8042 1 3950	3 55.4
	20	2 24 58 77	+T8 FO 27 2	T 270 F422	3 39-4
	24	24 41 07	-8 a8 a 30.4	078 0477	3 23.4
	28	24 22 25 19./2	F7 20 2	276 0075	3 7.4
Okt.	2	22 70 64	56 1.6 1 28.0	275 8101	2 51.3
	6	22 24 20	54 22.6	274 7130 1 1061 274 7130 1 0268	2 35.1
	10	2 22 6 40	+18 52 56 5 3/.1	1.272 6862	2 18.9
	14	22 26.16	ST TL.2 **3.3	272 7442	2 2.7
	18	22 2.71	40 18.1	277 8022	I 46.4
	22	31 29.37 36.11	47 77 0	277 7276	1 30.1
	26	30 53.26 37.62	47 17.9 <sub>2</sub> 6.4 45 11.5 <sub>2</sub> 12.0	270 4702	1 13.8
	30	3 30 15.64 38.86	+18 42 50 5	T 260 0277	0 57.5
Nov.	3	29 36.78 39.80	40 42.8 2 20.4	260 1855	0 41.1
	7	28 56 08	38 22.4 2 23.1	269 1554 2160	0 24.7
	II	28 16.52 40.46	35 59.3 2 25.0	268 9394 1011	0 8.3
	15	2= 66 40.00	33 34.3 2 25.5	268 8282	23 47.8
	19	2 26 54 70	+18 31 8.8 2 25.3	T 268 8525	23 31.4
	23	26 T2 OT	08 42 5 - 3.3	268 0850	23 15.0
	27	05 00 55	26 19.5 2 24.0 26 19.5 2 21.5	260 2224	22 58.6
Dez.	1	04 52 00	23 58.0 2 18.1	260 5057	22 42.2
	5	24 TF 46 30.33	21 39.9	270 0704 4753 5848	22 25.9
	9	2 22 28 26 3/12	+18 10 26.4	1.270 6552 6904	22 9.5
	13	23 2.65 22.78	17 18.7 2 7.7	271 3456 7914	21 53.2
	17	22 28 87 33.75	15 17.3 1 53.8	272 1370 8876	21 36.9
	21	21 57.13 31.74	13 23.5 1 45.4	273 0246 9792	21 20.7
	25	21 27.67 26.97	11 38.1 1 36.3	274 0038 1 0650	21 4.5
	29	21 0.70 24.28	10 1.8 1 36.4	275 0688 1 1441	20 48.3
	33	3 20 36.42	+18 8 35.4	1.276 2129	20 32.2

-	7		Oh Welt-Zeit		Obere Kul-
Ta	g	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
194	0				
Jan.	0	11 45 28.04 8	+2 53 35.9 0 25.2	1.476 9880	5 10.5
0	4	45 26.13	E4 T2 -3.3	476 0154 9/20	4 54.8
	8	45 22.2T 3.92	F4 20 2	475 OGT 2 9541	4 39.0
	12	45 T6 2T 5.90	55 20.0	474 T206 930/	4 23.1
	16	15 8 10	56 22 8 2.9	172 2285	4 7.3
	20	11 44 58.81	+2 57 47 2	T 470 2602	3 51.4
	24	11 17 21	+2 59 13.0 1 25.7 +2 59 13.0 1 26.4	477 5200	
	28	44 24 16	+3 0 49.4 1 46.4	470 7421 7415	
Febr.	I	14 TO 26	2 35.8 1 55.8	470 0006 /413	
1 001.				160 2007	3 3.6
	5	TT 40 45 05 1/.//	+3 6 36.0 2 4.4 +2 6 36.0 2 12.2	T 468 6722	
	9	11 43 45.25 19.07 43 26.18	8 48.2 2 10.1	160 2022 3//0	0 0
	13	20,25	TT 7.0 2 19.1	467 5797 4520	0.0
	17	43 5.93 21,28	II 7.3 <sub>2 25.1</sub>	467 TOTT	1 59.4
	21	42 44.65 22.17	I3 32.4 2 30.2	467 1277 3858	I 43.4
	25	42 22.48 22.93	16 2.6 2 34.2	466 7419 3172	I 27.3
Mana	29	11 41 59.55 23.54	+3 18 36.8 2 37.4	1.466 4247 2475	I 11.2
März	4	41 36.01 24.01	21 14.2 2 39.6	466 1772 1754	0 55.0
	8	41 12.00 24.32	23 53.8 2 40.6	466 0018	0 38.9
	12	40 47.68 24.45	26 34.4 2 40.7	465 8984 306	0 22.8
	16	40 23.23 24.42	29 15.1 2 39.7	465 8678 424	0 6.6
	20	11 39 58.80 24.25	+3 31 54.8 2 37.7	1.465 9102 1139	23 46.5
	24	39 34.55 23.93	34 32.5 2 34.9	466 0241 1818	23 30.4
A	28	39 10.62 23.46	37 7.4 2 30.8	466 2089 2548	23 14.2
April	1	38 47.16 22,86	39 38.2 2 26.3	466 4637 3231	22 58.1
	5	38 24.30 22,11	42 4.5 2 20.5	466 7868 3894	22 42.0
	9	II 38 2.19 <sub>21.20</sub>	+3 44 25.0 2 12 0	1.407 1702	22 25.9
	13	37 40.99 20.16	46 38.9 2 6.5	407 0297 5140	22 9.9
	17	37 20.83 19.01	48 45.4 1 58.4	468 1440 5724	21 53.8
	21	37 I.82 <sub>17.76</sub>	50 43.8 1 49.8	468 7170 6268	21 37.7
	25	36 44.06 16.40	52 33.6 <sub>1 40.4</sub>	469 3438 6783	21 21.7
	29	11 36 27.66	+3 54 14.0 1 30.4	1.470 0221 7259	21 5.7
Mai	3	36 12.70 <sub>13.40</sub>	55 44·4 <sub>1 20.0</sub>	470 7480 7699	20 49.8
	7	35 59.30 11.77	57 4.4 1 9.0	471 5179 8095	20 33.8
	II	35 47.53 10.07	58 13.4 0 57.6	472 3274 8451	20 17.9
	15	35 37.46 8.31	59 11.0	473 1725 8756	20 2.0
	19	11 35 29.15 6.52	+3 59 56.9 ° 34.1	1.474 0481 9020	19 46.2
	23	35 22.63 4.67	+4 0 31.0 0 22.0	474 9501 9243	19 30.3
	27	35 17.96 2.82	0 53.0 0 9.7	475 8744 9422	19 14.5
	31	35 15.14 0.92	I 2.7 0 2.6	476 8166 9557	18 58.8
Juni	4	35 14.22 1.00	1 0.1 0 15.0	477 7723 9646	18 43.0
	8	11 35 15.22	+4 0 45.1 0 27.4	1.478 7369 9688	18 27.3
	12	35 18.14 4.83	+4 0 17.7 0 39.7	479 7057 9686	18 11.6
	16	35 22.97 6.71	+3 59 38.0 0 51.9	480 6743 9620	17 56.0
	20	35 29.68 8.78	58 46.1 3.7	481 6382 9554	17 40.4
	24	35 38.26	57 42.4	482 5936 9554	17 24.8
	28	35 48.67 12.24	56 26.9 1 26.9	483 5364 0360	17 9.3
Juli	2	11 36 0.91	+3 55 0.0	1.484 4633	16 53.7

			Oh Welt-Zeit		Obere Kul-
Ta	80	Scheinbare Rektaszension	Scheinbare Deklination	log Δ	mination in Greenwich
194	.0				
Juli	2	11 36 0.91 B	+3°55′ 0.0 , 282	1.484 4633	16 53.7
	6	26 14 01	E2 21 8 1 30.2	485 3694 8815	16 38.3
	10	26 20 62 15.72	51 32.8	486 2509 8536	16 22.8
	14	36 48.02 18.99	40 22.2 1 39.3	487 1045 8217	16 7.4
	18	37 7.01 20.51	47 23.9 2 19.0	487 9262 7871	15 52.0
	22	11 37 27.52 21.97	$+3454.9_{228.0}$	1.488 7133 7495	15 36.6
	26	37 49.49 23.36	12 26 0	489 4628 7089	15 21.2
	30	38 12.85 24.69	40 04 2 30.5	490 1717 6600	15 5.9
Aug.	3	38 37.54 25.91	37 I5.7 2 52.1	490 8372 6188	14 50.6
	7	39 3.45 27.05	34 23.6 2 58.9	491 4560 5697	14 35-3
	11	11 39 30.50 28.07	+2 2T 24.7	1.492 0257 5186	14 20.0
	15	39 58.57 29.02	28 10.7	492 5443 4657	14 4.7
	19	40 27.59 29.86	25 9.0 3 10.7 3 15.6	493 0100 4109	13 49.5
	23	40 57.45 30.60	21 53.4 3 19.9	493 4209 3550	13 34-3
5	27	41 28.05 31.26	18 33.5 3 19.9	493 7759 2966	13 19.0
	31	11 41 59.31 31.80	$+3$ 15 10.1 $\frac{3}{3}$ $\frac{23.4}{26.4}$	1.494 0725 2371	13 3.8
Sept.	4	42 31.11 32.22	11 43.7 3 28.6	494 3096 1765	12 48.6
	8	43  3.33  32.52	8 TS.T 3 20.0	494 4861 1147	12 33.4
	12	$43\ 35.85\ \frac{32.52}{32.72}$	4 45.2	494 6008 534	12 18.3
	16	44 $8.57 \frac{32.72}{32.80}$	+2 T T47	494 6542 88	12 3.1
	20	II 44 41.37 32.78	$+2$ 57 44.2 $\frac{3}{3}$ 30.5 $\frac{30.5}{29.8}$	1.494 6454 702	11 47.9
	24	45 14.15 32.65	54 14.4 3 28.2	494 5752 1329	11 32.7
	28	45 46.80 32.39	50 46.2 3 25.9	494 4423 1954	11 17.5
Okt.	2	46 19.19 32.03	47 20.3 3 23.9	494 2469 2574	11 2.3
	6	46 51.22 31.52	12 57 2 3 23.0	493 9895 3178	10 47.1
	10	11 47 22.74 30.91	+2 40 28.2	T 402 6717	10 31.9
	14	47 53.65 30.19	37 23.8	493 0717 3776	10 16.7
	18	48 23.84 29.36	34 14.6	492 8585 4923	10 1.5
	22	48 53.20 28.44	21 11 2 3 3.3	402 2662 4943	9 46.2
	26	49 21.64 27.39	28 14.7 <sub>2</sub> <sub>49.2</sub>	491 8188 6008	9 31.0
	30	11 49 49.03 26.23	$+2\ 25\ 25.5\ \frac{2}{2}\ 41.3$	1.491 2180 6521	9 15.7
Nov.	3	50 15.26 24.97	22 44.2 2 32.5	490 5659 7003	9 0.4
	7	50 40.23 23.60	20 11.7 2 23.1	489 8656 7454	8 45.1
	11	51 3.83 22.15	17 48.6 2 13.1	489 1202 7876	8 29.8
	15	51 25.98 20.62	15 35.5 <sub>2</sub> 2.9	488 3326 8266	8 14.4
	19	TT ST 46.60	+2 13 32.6 1 51.9	1.487 5060 8624	7 59.0
	23	52 5.61 17.31	TT 40 7	486 6436 8946	7 43.6
	27	F2 22 02 1/·31	10 0.2 1 28.6	485 7490 9230	7 28.2
Dez.	1	52 22.92 15.53 52 38.45 13.70	8 31.6 1 28.0	484 8260 9468	7 12.7
	5	50 FO TE 13.7°	7 15 2	182 8702 9400	6 57.2
	9	11 53 3.94 <sub>9.86</sub>	±2 6 TT 4	1.482 9135 9808	6 41.7
	13	F2 T2 80	5 20.3 ° 38.1	48T 0227	6 26.1
	17	E2 2T 60	4 42.2 0 25.0	180 0118 9909	6 10.5
	21	53 27.59 5.90	4 17.2 0 11.8	470 0452	5 54.9
	25	53 31.46 1.85	1 51	458 0455 37//	5 39.2
	29	53 33.31 0,20	4 6.8 0 14.6	478 9475 <sub>9936</sub> 477 9539 <sub>9842</sub>	5 23.5
	33	11 53 33.11	+2 4 21.4	1.476 9697	5 7.8

	-21	Oh Welt-Zeit					
Tag	Rektaszension 1950.0	Fixstern- aberra- tion	Deklination 1950.0	Fixstern- aberra- tion	log $\Delta$	Licht- zeit	Obere Kul- mination in Greenwich
1940		4					
Jan. o	8 22 29.59 20.52	+1.31	+23 20 36.6	-4.9	1.579 6046 3263	d 0.2192	1 48
4	22 9.07 21.23	1.35	22 11 0	4.9	579 2783 2730	2190	1 31
8	21 47.84	1.39	23 45.8 94.8	4.9	579 0053 2182	2189	1 15
12	21 26.05 22.22	1.41	25 20.5 94.7 25 20.5 94.1	4.9	578 7871 1622	2188	0 59
16	21 3.83 22.50	1.43	26 54.6 93.0	4.8	578 6249 1055	2187	0 43
20	8 20 41.33 22 64	+1.44	$+23 28 27.6 \frac{93.5}{91.4}$	-4.7	1.578 5194 488	0.2186	0 27
· 24	20 18.69 22.65	1.45	29 59.0 80 2	4.6	578 4706	2186	0 11
28	19 56.04 22.51	1.44	31 28.3 86.9	4.5	578 4785 642	2186	23 51
Febr. 1	19 33.53 22.24	1.43	32 55.2 84.0	4.4	578 5427	2186	23 35
5	19 11.29 21.83	1.41	34 19.2 80.6	4.2	578 6629	2187	23 19
9	8 18 49.46 21.27	+1.39	+23 35 39.8 76.8	<b>-4.0</b>	1.578 8383	0.2188	23 3
13	18 28.19 20.57	1.36	36 56.6 72.6	3.8	579 0677 2818	2189	22 47
17	18 7.62	1.32	38 9.2 68.3	3.6	579 3495 3320	2190	22 31
21	17 47.86 18.82	1.27	39 17.5 63.6	3.3	579 6815 3799	2192	22 14
25	17 29.04 17.78	1.21	40 21.1 58.6	3.0	580 0614	2194	21 58
29	8 17 11.26 16.63	+1.15	+23 41 19.7 53.4	-2.8	1.580 4869 4688	0.2196	21 42
März 4	16 54.63 15.38	1.09	42 13.1 48.0	2.5	580 9557 5004	2199	21 26
8	16 39.25 14.03	1.02	43 1.1 42.3	2.2	581 4651	2201	21 10
12	16 25.22	0.94	43 43.4 36.6	1.9	582 0121 5812	2204	20 54
16	16 12.64	0.86	44 20.0 30.8	1.6	582 5934 6120	2207	20 38
20	8 16 1.57 9.51	+0.78	+23 44 50.8 24.9	-1.2	1.583 2054 6202	0.2210	20 23
24	15 52.06 7.90	0.69	45 15.7 19.1	0.9	583 8447 6620	2213	20 7
28	15 44.16 6.23	0.60	45 34.8 13.1	0.6	584 5077 6835	2217	19 51
April 1		0.51	45 47.9 + 7.1	-o.2	585 1912 7005	2220	19 35
5	15 33.41 2.78	0.41	45 55.0 , 1.2	+0.1	585 8917 7128	2224	19 19
9		+0.31	+23 45 56.2 4.6	+0.4	1.586 6055	0.2227	19 3
13		0.22	45 51.6 10.3	0.7	587 3288 7280	2231	18 48
17	15 30.36	0.12	45 41.3 15.9	1.1	588 0577 7309	2235	18 32
21	15 32.87	+0.02	45 25.4 21.4	1.4	588 7886 7294	2239	18 16
25	15 37.13 5.00	-0.08	45 4.0 26.7	1.7	589 5180 7247	2242	18 I
29	8 15 43.12	-0.18	+23 44 37.3 31.8	+2.0	1.590 2427 7167	0.2246	17 45
Mai 3	15 50.83	0.27	44 5.5 36.8	2.2	590 9594 7053	2250	17 29
7	16 0.24	0.37	43 28.7 41.7	2.5	591 6647 6905	2253	17 14
11		0.46	42 47.0 46.2	2.8	592 3552 6725	2257	16 58
15		0.55	42 0.8 50.4	3.0	593 0277 6515	2261	16 43
19	8 10 38.22	-0.64	+23 41 10.4 54.5	+3.3	1.593 6792 6277	0.2264	16 27
23	16 53.94 17.16	0.72	40 15.9 58.3	3.5	594 3069 6015	2267	16 12
27	17 11.10 18.53	0.80	39 17.6	3.7	594 9084 5728	2270	15 56
J: 3I	1 17 29.03 10.81	0.88	38 15.7 65.2	3.9	595 4812 5416	2273	15 41
Juni 4	17 49.47 21 OX	0.96	37 10.5 68.1	4.1	596 0228 5078	2276	15 26
8	8 18 10.55 22.22	-1.03	+23 36 2.4 70.8	+4.2	1.596 5306 4718	0.2279	15 10
12	18 32.78 22 20	1.09	34 51.6 73.2	4.4	597 0024 4340	2281	14 55
16	18 56.07 24 26	1.15	33 38.4 75.2	4.5	597 4364 2014	2284	
20	19 20.33 25.15	1.20	32 23.1	4.6	597 8308 2524	2286	
24	19 45.48 25 05	1.25	31 0.1 78.5	4.7	590 1042	2288	14 9
28	20 11.43 26 67	1.30	29 47.6	4.8	598 4953 2672	2289	13 53
Juli 2	8 20 38.10	-1.34	+23 28 27.9	+4.8	1.598 7625	0.2291	13 38

			Oh Welt-Ze	it	18 10 1	E (8)	Obere Kul
Tag	Rektaszension	Fixstern- aberra- tion	Deklination 1950.0	Fixstern- aberra- tion	$\log\Delta$	Licht- zeit	mination in Greenwich
1940				_ (=		7-19	11.5%
Juli 2	8 20 38.10 37.20	-1.34	+23 28 27.9 804	+4.8	1.598 7625	0.2291	13 38 m
6	27 5 30 27.29	1.37	25 7 7	4.9	508 0845	2292	13 23
IC	27 22 20	1.40	27 166	4.9	E00 1602 1/3/	2293	13 8
14	20.22	1.42	25 40.0 81.0 24 25.6 80.8	4.9	599 2888 812	2293	12 52
18		1.43	23 4.8 80.2	4.9	599 3700 335	2294	12 37
22	20./4	-1.44	+23 21 44.6 79.3	+4.8	$1.5994035 \frac{333}{146}$	0.2294	12 22
26		1.45	20 25.3 78.1	4.8	599 3889 629	2294	12 7
30		1.44	19 7.2 76.5	4.7	599 3260 1114	2294	11 51
Aug. 3	20./9	1.43	17 50.7 74 5	4.6	599 2146 1597	2293	11 36
7		1.42	$16\ 36.2\ \frac{74.3}{72.2}$	4.4	599 0549 2075	2292	II 2I
II		-1.40	$+23$ 15 24.0 $\frac{72.2}{69.7}$	+4.3	1.598 8474 2545	0.2291	11 6
15	25 50.00 27.40	1.37	14 14.3 66.7	4.1	598 5929	2290	10 50
19		1.34	13 7.6 63.4	3.9	598 2922 3459	2288	10 35
23		1.30	12 4.2 59.9	3.7	597 9463 3902	2286	10 20
27		1.26	11 4.3 55.9	3.5	597 5561 4333	2284	10 5
31	8 27 35.67 24.46	-1.21	+23 10 8.4 51.7	+3.3	1.597 1228 4749	0.2282	9 49
Sept. 4		1.15	9 16.7 47.1	3.0	596 6479 5149	2279	9 34
8	28 23.61 22.41	1.09	8 29.6 42.3	2.8	596 1330 5529	2277	9 19
12		1.03	7 47.3 37.3	2.5	595 5801 5886	2274	9 3
16	29 7.27 20.02	0.96	7 10.0	2.2	594 9915 6222	2271	8 48
20		-0.89	$+23$ 6 38.0 $\frac{32.5}{26.5}$	+1.9	1.594 3693 6535	0.2268	8 33
24	29 46.01 17.34	0.81	6 11.5 20.8	1.6	593 7158 6825	2264	8 17
28	30 3.35 15.89	0.73	5 50.7 14.8	1.2	593 °333 <sub>7090</sub>	2261	8 2
Okt. 2		0.64	5 35.9 8.7	0.9	592 3243 7323	2257	7 46
6	30 33.60	0.55	5 27.2 2.6	0.5	591 5920	2253	7 31
10	8 30 46.37	-0.46	$+23$ 5 24.6 $\frac{1}{3.7}$	+0.2	1.590 8396 7692	0.2249	7 15
IZ	30 57.51 0.47	0.37	5 28.3 10.1	-0.2	590 0704 7820	2245	7 0
18	31 6.98 7.77	0.27	5 38.4 16.5	0.5	589 2875 7022	2241	6 44
22	31 14.75 6.01	0.17	5 54.9 22.9	0.9	588 4942 8004	2237	6 29
26	31 20.76	-0.07	6 17.8 20.3	1.2	587 6938	2233	6 13
30	8 31 24.99 2.44	+0.03	+23 6 47.1 35.7	-1.6	1.586 8899	0.2229	5 57
Nov.	31 27.43 0.64	0.13	7 22.8 41.9	1.9	586 0864	2225	5 42
7	1,15	0.23	8 4.7 47.0	2.3	585 2874 7007	2221	5 26
11		0.33	8 52.0 53.8	2.6	584 4967 7787	2217	5 10
I	31 23.99 4.60	0.42	9 40.4 50.5	2.9	583 7180 7630	2213	4 54
19	8 31 19.30 6.42	+0.52	+23 10 45.9 64.9	-3.2	1.582 9550 7428	0.2209	4 38
23	31 12.88 8.12	0.61	11 50.8 <sub>70.1</sub>	3.5	582 2112 7208	2205	4 23
D 2'	31 4.76 9.77	0.70	13 0.9 75.0	3.8	581 4904 6938	2201	4 7
Dez.	30 54.99 11.35	0.79	14 15.9 70.4	4.0	580 7966 6631	2198	3 51
	30 43.64 12.87	0.88	15 35.3 87 4	4.2	580 1335 <sub>6288</sub>	2194	3 35
	8 30 30.77	+0.96	+23 16 58.7 87 0	-4.4	1.579 5047 5915	0.2191	3 19
I	30 10.40 15.65	1.03	18 25.7 90.2	4.6	578 9132 5512	2188	3 3
I,	7 30 0.81 16.80	1.10	19 55.9 92.9	4.8	578 3620 5080	2185	2 47
2:	29 43.92	1.17	21 28.8 95.2	4.9	577 8540 4623	2183	2 31
2	29 25.87	1.23	23 4.0 96.9	5.0	577 3917 4139	2181	2 15
20	9   29   6.77	1.28	24 40.9 98.2	5.1	576 9778 2628	2179	1 59
3.	8 28 46.75	+1.32	+23 26 19.1	-5.1	1.576 6150	0.2177	1 43

Oh		Mittleres Äquinoktium 1950.0							
Welt-Zeit	X	$\Delta X^*$	Y	<b>△Y*</b>	Z	<i>∆Z</i> *)			
1940									
Jan. o	+0.146 062 <sub>+17 270</sub> - 43	+1	-0.892084 + 2533 + 278	+2	-0.386 911 <sub>+1 099</sub> +120	-3			
I	0.163 332 17 220 50	<b>-</b> 5	0.889 551 2 800 276	-2	0.385 812 1 219 120	-3			
2	0.180 552 17 165 55	-3	0.886 742 2.86 277	$+\mathbf{r}$	0.384 593	-1			
3	0.197 717 17 106 59	+4	0.883 656	-4	0.383 254 1 458 119	2			
4	0.214 823	+2	0.880 295 2 626 275	-4	0.381 796	+4			
5	0.231 864 16 969 72	-4	0.876 659 3 910 274	-4	0.380 218 1 697 119	0			
6	+0.248 833 <sub>+16 893</sub> - 76	0	-0.872 749 + +273	-3	-0.378 521 <sub>+1 814</sub> +117	4			
7	0.265 726 16 810 83	-3	0.868 566 272	-3	0.376 707 1 933 119	+4			
8	0.282 536 16 723 87	+1	0.864 111 4 725 270	-4	0.374 774 2 050 117	0			
9	0.299 259 16 630 94	<u>-4</u>	0.859 386	-1	0.372 724 2 166 116	-3			
10	0.315 888 16 530 99	-3	0.854 392	$+\mathbf{r}$	0.370 558	—I			
II	0.332 418 16 426 104	-r	0.849 131 5 527 266	+5	0.368 276 2 397 115	-2			
12	+0.348 844 <sub>+16 316</sub> -110	-2	-0.843604 + 5790 + 263	+2	-0.365 879 <sub>+2 511</sub> +114	<b>—</b> 3			
13	0.365 160 16 201 115	+1	0.837 814 6 052 262	+3	0.363 368 2 624 113	-2			
14	0.381 361 16 082 119	+5	0.831 762 6 310 258	-4	0.360 744 2 726 112	0			
15	0.397 443 15 956 126	0	0.825 452 6 567 257	+2	0.358 008 2 848 112	+5			
16	0.413 399 15 827 129	+3	0.818 885 6 822 255	+5	0.355 160 2 958 110	+3			
17	0.429 226 15 691 136	-3	0.812 063 7 074 252	+4	0.352 202 3 068 110	+4			
18	+0.444 917 +15 552 -139	+3	-0.804989 + 7324 + 250	+3	-0.349 134 <sub>+3 176</sub> <sup>+108</sup>	—ı			
19	0.460 469 15 408 144	+2	0.797 665 7 570 246	-4	0.345 958 3 282 106	-4			
20	0.475 877 15 259 149	I	0.790 095	I	0.342 676 3 389 107	+3			
21	0.491 136 15 106 153	-2	0.782 281 8 056 242	+2	0.339 287 3 494 105	+1			
22	0.506 242	-4	0.774 225 8 205 239	+1	0.335 793 3 597 103	-3			
23	0.521 190 14 787 161	0	0.765 930 8 530 235	3	0.332 196 3 700 103	0			
24	$+0.535977_{+14621}^{-166}$	-2	-0.757 400 + 8 765 +235	+4	-0.328 496 <sub>+2 801</sub> + 101	-3			
25	0.550 598 14 451 170	-2	0.748 635 8 995 230	-4	0.324 695	- <b>1</b>			
26	0.565 049	+2	0.739 640 9 223 228	<b>-</b> 5	0.320 794 4 001 100	+4			
27	0.579 327	一3	0.730 417 0 448 225	-4	0.316 793 4 099 98	0			
28	0.593 426	+3	0.720 969 9 672 224	+3	0.312 694 4 195 96	_3			
29	0.607 344 13 731 187	-2	0.711 297 9 892 220	+1	0.308 499 4 291 96	+1			
30	+0.621 075 +13 540 -191	-r	-0.701 405 <sub>+10 110</sub> +218	+3	-0.304 208 <sub>+4 3</sub> 86 + 95	+2			
31	0.034 015	+5	0.691 295	+2	0.299 822 4 478 92	-3			
Febr. 1	0.047 901 12 146 200	+1	0.680 970	-2	0.295 344 4 571 93	$\pm 4$			
2	0.661 107 12 012 203	+5	0.670 434 10 745 209	+2	0.290 773 4 661 90	-1			
3	0.074 050	+3	0.659 689 206	+3	0.286 112 4 750 89	-3			
4	0.686 785 12 523 212	+4	0.648 738 11 152 201	-2	0.281 362 4 837 87	<del>-4</del>			
5	+0.699 308 +12 307 -216	+3	-0.637 586 <sub>+11 351</sub> +199	+1	$-0.276525_{+4923} + 86$	-2			
6	0.711 615 12 087 220	+1	0.020 235	-2	0.271 602	-1			
7	0.723 702 11 862 225	-2	0.614 690 11 726 191	+2	0.266 595	+3			
8	0.735 564 11 635 227	+5	0.602 954 11 023 187	+4	0.261 505	$\pm 4$			
9	0.747 199 +11 404 231	+3	0.591 031 +12 106 183	+5	0.256 334 +5 250 79	+4			
10	+0.758603	-4		+5	-0.251084 + 78	+5			

<sup>\*)</sup> AX, AY, AZ sind in Einheiten der 7. Dezimale gegeben.

О ћ				Mit	tleres 2	Äq	uino	ktiu	m 19	50.0			
Welt-Zeit		X	-	△ X*	)	Y	7	19.1	<b>△Y</b> *)	Z			$\Delta Z^*$
1940			-										
Febr.10	+-0.7586	03 +11	-/O -23	6 -4	-0.578	925	+12 28	+179	+5	-0.251 084	+5 328	+78	+5
II	0.769 7		100		0.566		+12 28 12 46	5	+4	0.245 756	-	76	+1
12	0.780 7		930 <sup>23</sup> 688 <sup>24</sup>	i	0.554		12 40		0	0.240 352	5 4°4 5 477	73	-5
13	0.791 3	80	444 24	4   +1	0.541		12 79		0	0.234 875		72	-3
14	0.8018	22	195 24	9 -4	0.528	754	12 95		+3	0.229 326	5 549 5 619		0
15	0.8120	28	945		0.515		12 95		+4	0.223 707	5 688	69	+5
16	+0.8219	7.2	-21		-0.502	68a			+1	-0.218 019		+67	+4
17	0.831 6	6- 9	092		0.489		+13 26	9	_I	0.212 264	+5 755	64	-2
18	0.841 1	9	430		0.475		13 41	0	-4	0.206 445	5 819	63	-2
19	0.850 2	9	170	1	0.462	793 121	13 56	4	-4	0.200 563	5 882	60	-4
20	0.859 1	06	917		0.448	720	13 70	2	-4	0.194 621	5 942	60	+3
21	0.867 8	-	054	-	0.434		13 83	0	$-\frac{4}{5}$	0.188 619	6 002	57	0
		- 0	390				13 96	9			6 059		
22	+0.876 2		123 -26		-0.420		14 09	7 +128	-I	-0.182 560	+6 114	<b>+55</b>	-r
23	0.884 3		855 26		0.406		14 22		-3	0.176 446	6 168	54	+3
24	0.892 2	18 7	583 27		0.392		14 33	9 119	I	0.170 278	6 220	52	+3
25	0.899 8	01 7	311 27		0.378		14 45	5 116	+4	0.164 058	6 270	50	+2
26	0.907 I		036 <sup>27</sup>		0.363 8		14 56	6 111	+2	0.157 788	6 319	49	+2
27	0.9141	48 6	760 27	+5	0.349	245	14 67		+4	0.151 469	6 364	45	-4
28	+0.920 9	08 _ 6	480 -28	o	-0.334	571	+14 77	+102	-2	-0.145 105	+6 410	$\pm$ 46	+3
29	0.927 3	00	199 28	1 -2	0.319	795	14 87		+2	0.138 695	6 452	42	-3
März 1	0.933 5	×m	915 28	4   -3	0.304	920	14 96		+2	0.132 243	6 493	41	-2
2	0.939 5	00	631 28	4 +3	0.289	951	15 05		+3	0.125 750	6 531	38	-4
3	0.945 I	22	343	8   -3	0.274 8	892	15 14.	8 =	+1	0.119 219	6 568	37	- <del> -</del> I
4	0.950 4		o55 28	8 0	0.259	748	15 22.	80	-2	0.112 651	6 603	35	+4
5	+0.955 5			1 -5	-0.244	524	-	9 + 75	-2	-0.106 048	+6 636	+33	+2
6	0.960 2	0 ° T	704		0.229	225			+2	0.099 412	6 666	30	-4
7	0.964 7	67 4	472 29		0.2138		15 37	60	0	0.092 746	6 694	28	-5
8	0.968 9	46	179 <sup>29</sup> 885 <sup>29</sup>		0.1982		15 43	67	+4	0.086 052	6 720	26	-4
9	0.972 8	3.	005		0.182		15 49	-6	+4	0.079 332	6 744	24	0
10	0.9764	21	590 29 293 29	7 -5	0.167	372	15 55: 15 60:		0	0.072 588	6 767	23	+4
11	+0.9797				-0.151				+2	6-0		+10	-4
12	0.982 7	10	990		0.136	119.	+15 64		0	0.059 035	+6 786	+19	$-\frac{4}{5}$
13	0.985 4		698 29		0.120 4	124	15 68	26	+2	0.052 232	6 803	17	+1
14	0.987 8	00 -	401		0.120 2		15 72.	1 20	0	0.052 232	6 819	13	+1
		T T	102		0.088		15 75	76			6 832		
15	0.989 9 0.991 7	T C	804 29		0.033		15 78		$\begin{vmatrix} +2 \\ -1 \end{vmatrix}$	0.038 581	6 844	8	+4 -2
			505 29		1		15 80	)			6 852		
17	+0.993 2:	20 + 1 :	207 -29	- 1	-0.057 3	376	+15 81	6 + 16	+1	-0.024 885	+6 860	+ 8	+3
18	0.994 4:	27	909 29		0.041	500	15 82	7 11	0	0.018 025	6 864	4	-3
19	0.995 3	36	511 29		0.025		15 83		-3	0.011 161	6 867	3	-1
20	0.995 9		314 29		—o.oog g	900	Tr 82	+ 1	-5	-0.004 294	6 868	+ 1	0
21	0.996 20	61	18 29		+0.005 9	934 .	+15 832	_ 2	0	+0.002 574	+6 867	— I	0
22	+0.996 2	79	29	7   -5	+0.021 7	766	, ,	- 8	-4	+0.009 441		<b>-</b> 3	-r

<sup>\*)</sup>  $\varDelta X$ ,  $\varDelta Y$ ,  $\varDelta Z$  sind in Einheiten der 7. Dezimale gegeben.

0 h				Mitt	leres Ä	quino	ktiu	m 19	50.0		
Welt-Zeit		X		△ X*)	7	Y		<b>△Y*</b> )	Z		<b>∆</b> Z*)
1940										Т	
März 22	+0.996 27	9 _ 270	-297	-5	+0.021 76	6 +15 824	- 8	-4	+0.009 441 +6 86.	- 3	I
23	0.996 00	00 [7]	206	-2	0.037 59	15 81	TY	0	0.016 305 6 850	t .	-3
24	0.995 42	5 870	205	+3	0.053 40	3 15 70	16	-2	0.023 164 6.85		-4
25	0.994 55	5 1 164	201	+5	0.069 20	0 15 77	20	-2	0.030 016		-2
26	0.993 39	I 1450	205	-1	0.084 97	7 15 75	2.4	-I	0.030 859 6.82		+3
27	0.991 93	1 753	204	-1	0.100 73	0 15 72	20	<b>-4</b>	0.043 692 6 820		+2
28	+0.990 17	0	204	-4	+0.11645	1	- 24	-4	+0.050 512 +6.800	_I4	+5
29	0.988 13	2 04/	201	-4	0.132 12	4 125 09	26	+4	0	) .	+2
30	0.985 79	Z 3+1	202	+3	0.147 79	Q 15 05°		-3	0.064.708		-3
31	0.983 15	·8 2033	202	+3	0.163 40	15 01.		-5	0 000 000	1	-5
April	0.980 23	2 923	201	+3	0.178 9	15 50.	3	+3	0.077 620	22	-3
2	0.977 01	3 410		0	0.194 48	15 51.	r6	+3	0.084 356 6 70	~ ~.	+4
2	+0.973 51	т 3 300	200	-	+0.209 94	15 45	6-	_ı	0 /0		
3	0.969 71	3/9	266	-5 $-2$	0.225 33	T15 39	4 65	+4	+0.091 059 +6 67 0.097 736 6 64	7 20	3
4	0.965 63	т 4004	286	+2	0.240 66		9 -	-2	0.104.000		
5 6	0.961 26	4 3/C	285	-I	1	15 25	-6	-4		·	-
7	0.956 60		284		0.255 92	13 10	80	0	0 777 585	5 26	
8	0.951 66		282	<u>-5</u>	0.286 20	- 15 10.	2 84		0.704.704	9 26	
		5 441	404	-3		15 01	3 04	+3	J-1	3	
9	+0.946 44		-279	+1	+0.301 22		90	-2	+0.130 647 +6 47	-39	
10	0.940 94	10 5 770		-4	0.316 1	14 83	1 94	0	0.137 121 643	3 41	-5
II	0.935 16	07 6 054		+3	0.330 98		98	+2	0.143 554 6 20	43	
12	0.929 11	3 622	, 273	+4	0.345 72	14.62	3 103	-1	0.149 944 6 34	6 44	
13	0.922 78		271	+1	0.360 3	4 14 52	108	-4	0.156 290 6 30	<sub>0</sub> 46	
14	0.916 18	6 867	, 269	_I	0.374 8	14 41	111	+2	0.162 590 6 25	1 49	-1
15	+0.909 32		-265	+2	+0.389 29	93 +14 29	-115	+3	+0.168 841 +6 20	_49	+4
16	0.902 18	7 206	261	-2	0.403 59	14 17	120	-2	0.175 043 6 150		0
17	0.894 79	3 -6-6		+3	0.417 7	14 05	722	-I	0.181 193		-1
18	0.887 13	37 7.013	255	+5	0.431 82	7 13 92	728	-4	0.187 289 6 04		+5
19	0.879 22	24 8 168		+1	0.445 7	55 13 79	120	+2	0.193 331	C C	+1
20	0.871 05	6 8 421	2 = 2	-2	0.459 5	13 66	T 4 4	+4	0.199 316 5 92	8	+-2
21	+0.862 63			+3	-+0.473 2			+4	+0.205 243 +5 86		+3
22	0.853 96	5 - 0 0/0		+3	0.486 74			<b>—</b> I	0.211 111 5 80		
23	0.845 04	18 091/	~ ~ ~ ~	+1	0.500 1	13 3	U T45	-4	2 216 017	62	
24	0.835 88	36	242	+-3	0.513 3	13 ~4	7.48	-r	0.222 660 5 68		+4
25	0.826 48	32 9 402	220	+5	0.526 40	14	3 161	+3	0.228 340 5 61	6m	
26	0.816 83	9 04.	2.00	+2	0.539 40	. ~ 94		+4	0.233 953 5 54	J	_
27	+0.806 95	9 000	_225			/	-60		J JT	0	+5
27 28	0.796 84	14	221	-2	+0.552 19	2	162	<del>-4</del>	+0.239 499 +5 47		
	0.786 49	8 10 340	220	+1	0.564 82	28	160	+1	0.244 977 5 40	77	+4
29		12	226	-2	0.577 28	20 30	101	+4	3 33.		
Mai 1	0.775 92			0	0.509 50	12 13	171	-3 + 2	0.255 718 5 26	74	-
2	0.765 12		222	+4	+0.6136	9 +11 95	$8 \frac{172}{-178}$	$\begin{vmatrix} +3 \\ -2 \end{vmatrix}$	0.260 979 +5 18 +0.266 164	$5 \frac{76}{-76}$	
2	+0.754 09	19	-219	+5	T-0.013 0	1	-170	-2	1 0.200 104	-/0	-4

<sup>\*)</sup>  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.

O <sup>h</sup>		Mi	itt.	leres Äq	uinol	ktiu	m 19	50.0			
Welt-Zeit	X	42	X*)	7	7	-21	<b>△Y*</b> )	1	Z		∆Z*
1940					-						
Mai 2	+0.754 09911 24	2-219 +	-5	+0.613 677	+11 780	-178	-2	+0.266 164	- T. T.O.O.	<b>-</b> 76	+4
3	0.742 857		-3	0.625 457	11 601		+4	0.271 273	5 031	78	+3
4	0.731 399		-2	0.637 058	11 416	-0-	-2	0.276 304	4.051	80	2
5	0.719 729 11 88	0.7.0	-4	0.648 474	11 229	7 Q	+3	0.281 255	1 860	82	-5
6	0.707 849	204	-2	0.659 703	11 039	TOO	+4	0.286 124	4 787	82	0
7	0.695 765 12 28	202 -	-4	0.670 742	10 844	70#	-2	0.290 911	4 703	84	—ı
8	+0.683 478 _12 48	-196 +	-4	+o.681 586	+10 647		+2	+0.295 612	+ 4 617	<b>— 8</b> 6	<u>-4</u>
9	0.670 995	704	-2	0.692 233	10 447	200	+4	0.300 231	4 530	87	$-\mathbf{r}$
10	0.658 318 12 86	100	-3	0.702 680	10 244	202	+3	0.304 761	4 443	87	+4
II	0.645 451	185 +	-r	0.712 924	10 037	305	-2	0.309 202	1.252	90	-1
12	0.632 399	T80 1	-3	0.722 961	9 829	200	+2	0.313 557	4 263	90	0
13	0.619 167	THY	-4	0.732 790	9 617		-4	0.317 820	4 171	92	-3
14	+0.605 757 -13 58		-2	+0.742 407	+ 9 403	-214	-5	+0.321 99		<b>-</b> 93	_r
15	0.592 175 13 75		-4	0.751 810	9 403		-5	0.326 060		93	+-5
16	0.578 425 13 9	162	-5	0.760 996	8 969	21-	+2	0.330 054	3 891	94	+4
17	0.564 512	74 161 —	-2	0.769 965	8 748		-4	0.333 94	3 795	96	-3
18	0.550 438	7 F F	-4	0.778 713	8 525		-4	0.337 740	3 608	97	-5
19	0.536 209 14 38		-5	0.787 238	8 302		+4	0.341 438	3 601	97	C
20	+0.521 829 -14 52	0	-1	+0.795 540	+ 8 075		0	+0.345 039		<b>-</b> 98	+2
21	0.507 301 14 6		-2	0.803 615	7 848		+5	0.348 542	3 404	99	+-3
22	0.492 630		-4	0.811 463	7 618		0	0.351 940	3 305	99	+4
23	0.477 818	T25 - L	-4	0.819 081	7 386		-3	0.355 251	3 203	102	-3
24	0.462 871	79 132 +	-2	0.826 467	7 152	224	-4	0.358 454	2 102	101	+3
25	0.447 792	7 128	0	0.833 619	6 916		-3	0.361 556	3 000	102	+3
26	+0.432 585 -15 33	-124 -	-2	+0.840535	+ 6 678	-238	0	+0.364 556	+2 896	-104	_I
27	0.417 254	120	-2	0.847 213	6 439		+3	0.367 452	2 702	104	+2
28	0.401 803		-1	0.853 652	6 197	242	-ı	0.370 244	2 687	105	+3
29	0.386 237	77 111 -	-1	0.859 849	5 953	244	-3	0.372 931	2 582	105	+-5
30	0.370 560 15 78	4	-3	0.865 802	5 707	246	-2	0.375 513		107	-2
31	0.354 776	6 102 -	-2	0.871 509	5 460	247	+3	0.377 988	2 30/	108	<del>-</del> 4
Juni 1	+0.338 890 -15 98	34 - 98   -	-3	+0.876969	+ 5 212	-248	+5	+0.380 35	+2 260	-107	<b>+-1</b>
2	0.322 906		-I	0.882 181	4 960		-3	0.382 61	2 150	IIO	4
3	0.306 830	55 89 -	-5	0.887 141	4 708	252	+2	0.384 76	2041	109	+2
4 .	0.290 665 16 24	83 ] —	-2	0.891 849	4 455		+4	0.386 800	1 022	109	+5
5	0.274 417 16 3	79 -	-3	0.896 304	4 199	256	-2	0.388 738		III	— <b>I</b>
6	0.258 090 16 40		-2	0.900 503	3 943	256	+1	0.390 559	,	111	-3
7	+0.241 690 _16 40	68 - 68 -	-2	+0.904 446	+ 3 685	0	+1	+0.392 260	+1 508	-112	-5
8	0.225 222 16 5	6.1	-3	0.908 131	3 427	258	+5	0.393 86	1 486	112	-3
9	0.208 690 16 50		-I	0.911 558	3 168		+-5	0.395 353	3 1 374	112	c
10	0.192 100	53   -	-2	0.914 726	2 008	260	+3	0.396 72	T 26T	113	C
11	0.175 457 _16 66	49 -	-5	0.917 634	+ 2 648	260	+2	0.397 988	+1 149	112	_ ~
12	+0.158 765	- 43	0	$+0.920\ 282$		<b>—261</b>	-2	+0.399 13	7	-113	+2

<sup>\*)</sup>  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.

0 h			1 1	Mitt	leres Äquin	oktiu	m 19	50.0	-		
Welt-Zeit	-	X		△ X*)	Y	-21	△Y*)	2.	Z		∆Z*)
1940											
Juni 12	+0.158 765	—16 <i>7</i> 35	- 43	0	+0.920 282 +2 3	-261	-2	+0.399	137 +1 036	-113	+2
13	0.142 030		38	+3	0.922 669 2 1	261	2	0.400	173 923	112	0
14	0.125 257	16 807	34	+2	0.924 795	-6-	-I	0.401	og6 800	T T 4	-2
15	0.108 450	16.825	28	+5	0.926 660	261	0	0.401	905 60	117	+4
16	0.091 615	16.860		-1	0.928 264	261	+2	0.402	602	T T 4	-3
17	0.074 755	16 880	20	-r	0.929 607	261	+-2	0.403	185	TYO	-1
18	+0.057 875	-16 895	- 15	0	+0.930 689 <sub>+ 8</sub>		+2	+0.403	655 + 356	-114	-3
19	0.040 980		1.0	-4	0.021.510	60 261	+1	0.404	011 243	112	+2
20	0.024 073	16 012	6	+1	0.032 070	99 261	-I	0.404	254 130	112	+2
21	+0.007 160	16.016	- 3	0	0.932 369 +	37 262	-5	0.404	384 + 16	T T 4	-2
22	-0.009 756	16.012		+4	0.932 406 _ 2	261	-2	0.404		, 113	0
23	0.026 669	16 907	6	-3	0.932 182	86 262	-2	0.404	303	T T 4	<u>-4</u>
24	-0.043 576	-16 896	+ 11	-3	+0.931 696 _ ,	-26I	+2	+0.404		-114	-3
25	0.060 472	16 880		-2	0.930 949	262	+1	0.403	$767 \frac{325}{438}$	***	+1
26	0.077 352	16.860		-5	0.929 940	261	+3	0.403	329	T T 1	0
27	0.094 212	16 825		-4	0.928 670	32 262	0	0.402	777 66	112	4
28	0.111 047	16 805	20	-2	0.927 138	261	+2	0.402	112	7.72	+4
29	0.127 852	16 771		-2	0.925 345	261	+1	0.401	334 89	T T 1	0
30	-0.144 623	3 -16 721		+4	+0.923 291	-26I	+1	+0.400	442 _1 00	-112	+3
Juli 1	0.161 354	16 686	45	+4	0.920 976	260	+3	0.399	438	* ***	-3
2	0.178 040	16 628	.0	-2	0.918 401	260	+2	0.398	320 1 230	772	+3
3	0.194 678	16 583	55	+5	0.915 500	94 259	+2	0.397	090 134	112	+2
4	0.211 261	16 524	59	+4	0.912 472	52 258	+1	0.395	748 <sub>1 454</sub>	112	-1
5	0.227 785	16 459	6.11	+-5		258	-4	0.394	294 1 566	TTO	<del>-4</del>
6	-0.244 244		+ 69	-r	+0.905 510 -38	67 -257	-4	+0.392		-111	-1
7	0.260 634	16 316		-2	0.901 643	2 = =	+1	0.391	051 178	7.7.0	+1
8	0.276 950	16 236	80	+1	0.897 521	272	+4	0.389	264 180	3 111	-
9	0.293 186	16 152	0.0	-3	0.893 146		-2	0.387	366 <sub>2.000</sub>	6 108	
10	0.309 339	16 063	00	+4	0.888 518	78 250	+1	0.385		5 109	
11	0.325 402	15 970	93	-I	0.883 640	249	-2	0.383		108	<b>-4</b>
12	-0.341 372	2 —15 872	+ 98	I	$+0.878513_{-5.3}$	-247	-4	+0.381	022 -2 33	-107	-4
13	0.357 244	15770	Y 0.3	-3	0.873 139	246	-5	0.378	692 2.42	TOT	-5
14	0.373 014	15 664		-4	0.867 519	62 242	+2	0.376	255 <sub>2 54</sub>	TOP	0
15	0.388 678	15 553		-r	0.861 657	04 242	-3	0.373	713 264		-1
16	0.404 231	15 420	114	<u>-4</u>	0.855 553 6	240	-3	0.371	066 2 75		
17	0.419 670	15 321	T T S	-2	0.849 209 6	81 237	+2	0.368	315 <sub>285</sub> .	1 103	0
18	-0.434 991		+123	+4	+0.842 628 <sub>-6.8</sub>	,	-2	+0.365		7 -103	-3
19	0.450 189	15 071	125	+4	0.835 811	235	-5	0.362	504 3 05	103	-г
20	0.465 260	14 041	T 30	-2	0.828 759	84 232	-I	0.359	445	100	+3
21	0.480 201	14 807	134	-5	0.821 475	221	2	0.356	280 3 26	TOT	
22	0.495 008	-14 66a	138	<del>-5</del>	0.813 960	44 229	0	0.353	026 275	9 99	
23	0.509 677	7	+143	0		-227	+2	+0.349	667	- 99	-1

<sup>\*)</sup>  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.

01	h			1	Mitt	leres A	quin	oktiv	m 19	50.0		
Welt-		X			∆X*)		Y	1.0	<b>△Y*</b> )	Z		△Z*)
194	10											
Juli	23	-0.509 677 _	-14 526 <sup>+</sup>	-143	0	+0.806 2	16	227	+2	+0.349 667 -3 458	-99	-1
	24	0.524 203	-14 520 14 380	146	—r	0.798 2	$\frac{10}{45} - 79$	224	+3	0.246.220 3.450	97	+2
	25	0.538 583	14 380	151	+2	0.790 0		222	+3	0.340 209 3 555 0.342 654 3 653	-98	-2
	26	0.552 812	14 229	155	+2	0.781 6		221	0	0.339 001 3 748	95	+5
	27	0.566 886	13 915	159	0	0.772 9		220	-5	0.335 253 3 843	95	+3
	28	0.580 801	13 753	162	-3	0.764 1	30 90	217	-ı	0.331 410 3 937	94	+2
	29	-0.594 554 _		168	+4	+0.755 o		-214	+5	+0.327 473 -4 030	-93	0
	30	0.608 139	13 414	171	+2	0.745 7	62 95	212	+4	0.323 443	92	-1
	31	0.621 553	13 238	176	+3	0.736 2	59 07	210	+1	0.319 321 4 213	91	-2
Aug.	I	0.634 791	13 059	179	-r	0.726 5	40 00	20X	-2	0.315 108 4 202	90	-2
	2	0.647 850	12 875	184	+2	0.7166	25	204	+3	0.310 805	88	+2
	3	0.660 725	12 686	189	+4	0.706 5	00 103	201	+3	0.306 414 4 479	88	0
	4	-0.673 411 _	-12 495 <sup>+</sup>	-191	-3	+0.6961		-199	-2	+0.301 935 <sub>-4 564</sub>	-85	+4
	5	0.685 906	12 299	196	0	0.685 6	49 10 7	×06	-2	0.297 371 4 649	85	0
	6	0.698 205	12 099	200	+4	0.674 9	28	TOT	+4	0.292 722	83	0
	7	0.710 304		204	+5	0.664 0	16	180	+ <b>1</b>	0.287 990 4 814	82	-2
	8	0.722 199	11 689	206	-1	0.652 9	15 112	- 2 -	+3	0.283 176	80	0
	9	0.733 888	11 479	210	+2	0.641 6	29 114	+ Q +	+5	0.278 282 4 973	79	_r
	10	-0.745 <u>3</u> 67 _	-11 265 +	-214	+4	+0.630 1		45 —178	+2	+0.273 309 -5 050	<del>-77</del>	+1
	II	0.756 632	11 050	215	-2	0.618 5			—r	0.268 259 5 126	76	0
	12	0.767 682	10 830	220	+3	0.6066		91 171	+1	0.263 133	74	0
	13	0.778 512	10 009	221	—I	0.594 7		58 167	+1	0.257 933 5 273	73	-3
	14	0.789 121	10 384	225	+2	0.582 5		23 165	-5	0.252 660 5 345	72	<u>_5</u>
	15	0.799 505	10 157	227	+1	0.570 2	14 4		<u>-4</u>	0.247 315 5 415	70	-1
	16	—0.809 662 <sub>_</sub>	- 9 926 <sup>+</sup>	-231	+4	+0.557 7		<sub>42</sub> —158	-4	+0.241 900 -5 483	-68	+3
	17	0.819 588	9 694	232	<b>-4</b>	0.545	99 12 7		_1	0.236 417 5 550	67	+1
	18	0.829 282	9 459	235	-4	0.532 3	03 12 0	47 151	—I	0.230 867 5 616	66	-2
	19	0.838 741	9 220	239	+1	0.5193			-3	0.225 251 5 680	64	-I
	20	0.847 961	8 980	240	-3	0.506 2			-3	0.219 571 5 743	63	—I
	21	0.856 941	8 736	244	+1	0.493 0	21 13 3	80 140	+2	0.213 828 5 804	61	+1
	22	-0.865 677	- 8 <b>49</b> 0 <sup>+</sup>	-246	0	+0.4796		18 -138	-2	+0.208 024 -5 863	-59	+2
	23	0.874 167	8 241	249	+2	0.466 1	23 136		1	0.202 161	59	<u>-4</u>
	24	0.882 408	7 989	252	+3	0.452 4	7I 12 7	83 131	-1	0.196 239 5 078	56	-1
	25	0.890 397	7 735	254	+1	0.438 6	13 6	126		0.190 261 6 033	55	-3
	26	0.898 132	7 478	257	$+\mathbf{I}$	0.424 7	79 14 0	32 123		0.184 228 6 087	54	-4
	27	0.905 610	7 219	259	-2	0.410 7	47		-2	0.178 141 6 138	51	+3
	28	-0.912 829	- 6 957 <sup>+</sup>	-262	+1	+0.396 5		67 -115		+0.172 003 -6 188	-50	+3
	29	0.919 786	6 692	265	+4	0.382 3	28 11.3	79		0.165 815 6 236	48	-+-4
	30	0.926 478	6 425	267	+4	0.367 9	49 14 1	86 107	+4	0.159 579 6 282	46	+3
Came	31	0.932 903	6 155	270	+5	0.353 4	.03	80 103	+4	0.153 297 6 327	45	-2
Sept		0.939 058 _	- 5 883	272	+1	0.338 8				0.146 970 -6 370	43	-2
	2	0.944 941	+	-273	-4	+0.324 1	87	- 95	-4	+0.140 600	-40	+1

<sup>\*)</sup>  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.

0 <sup>h</sup>	160	1 10	Mitt	leres Äqu	inoktiv	m 19	50.0		
Welt-Zeit	X		△ X*)	Y		<b>△Y</b> *)	Z		<b>∆</b> Z*)
1940									
Sept. 2	-0.944 941 <sub>-5 610</sub>	+273	-4	+0.324 187	-14 782 -95	-4	+0.140 600 <sub>-6 410</sub>	-40	+1
3	0.950 551 5 333	277	+1	0.309 405	14 872 90	-2	0.134 190 6440		-3
4	0.955 884	2	-3	0.294 533	14 956 84	+5	0.127 741 6.486		<del>-5</del>
5	0.960 940	280	0	0.279 577	15 036 80	+4	0.121 255 6 521	24	-4
6	0.965 716 4 496		-5	0.264 541	15 112 76	0	0.114 734 6 554		-r
7	0.970 212 4 214	2×2	-4	0.249 429	15 182 70	+2	0.108 180 6 584		+4
8	-0.074.426	J-282	-5	+0.234 247	-67	-3	+0.101 596 <sub>-6 613</sub>		+1
9	$0.974428 -3932$ $0.978358 \frac{3}{3}647$		+3	0.218 998	-15 249 62	-2	0.094 983 6649	200	-2
10	0.982 005 3 363		-2	0.203 687	15 311 57 15 368 57	-т	0.088 343 6 666	- (	-4
II	0.985 368	286	0	0.188 319	15 422 54	-4	0.081 677 6 688		+2
12	0.988 445	286	-2	0.172 897	15 470 48	+3	0.074 989		-4
13	0.991 236 2 504		$-\mathbf{r}$	0.157 427	15 515 45	0	0.068 279 6 739		-3
14	0.000 540	00	+1	+0.141 912		0	1610		+3
15	0.005.056	280	+2	0.126 357	10 000	-3		- (	+3
16	200= 902	-0-	-I	0.110 765	15 594	+2	0,000	Y 4	+4
17	1 030		_I	0.095 142	15 023	-2	0.041 263 6 789		-3
- 18	T 000 860	201	0	0.079 491	15 651 26 15 675 24	-3	0.034 474 6 799		—I
19	1.001 926		-4	0.063 816	15 694 19	0	0.027 675 6807		-I
20	1 000 600	1 202	-4	+0.048 122		+2			_2
21	T 200 166 - 474	292	-5	0.032 414	-15 708	-4	-0 814	4	-3 + 1
22	T 002 248	293	-2	0.016 695	15 719	-5	- 0010		0
23	I 002 227	204	0	+0.000 969	15 /20	+2	0021		+4
24	T 000 900 400		-2	-0.014 758	15 727	+4	-0.006406 $6821$ $6820$	+ I	+2
25	T 000 T24	205	+5	0.030 482	15 /24	+4	0.013 226 6 816	4	+4
26	993 -1.001 141 <sub>-1.288</sub>		+4	-0.046 198	15 716	-2	- 0010		0
27	T1 200		+1	0.061 903	-15 705 <sup>+11</sup>	+2			_I
28	0.008.000	201	-4	0.001 903	15 000	+4			+3
29	0.006.202	206	+2	0.093 257	15 000	+3	· · · · · · · · · · · · · ·		+3
30	2 004 220	201	-2	0.108 896	15 039	-2		7.1	—i
Okt. 1	0.001.752	205	+2	0.124 504	15 000	1	0.047 233 6 769 0.054 002 6 752	TOT	+3
2	* 000 000			—0.140 075 <sub>-</sub>	15 5/1		0 /3-		
	0.085.025 13.030	202	+I -I	0.146 075	-15 530 <sup>+41</sup>	$-2 \\ +4$	(- 100	2.1	-4 + 1
3 4	0.082 586 3 349			0.155 005	15 402	<del>- 4</del>   -1	0 / 1 +		I
5	0.078.046	202	$\begin{vmatrix} -3 \\ +4 \end{vmatrix}$	0.171 087	15 431 57	+2	-0-0-5		0
6	0.075.014	280	-I	0.201 892	15 3/4 62	+2		26	-4
7	0.070.702	288	-3	0.201 092	15 312	-3		-0	-3
8					15 247		- 0013		
	-0.966 284 +4 795	+286	-5	-0.232 451	-15 176 <sup>+71</sup>	+2	-0.100 816 -6 582		+3
9	0.901 489 5 080	205	-2	0.247 627	15 101 75	+3	0.107 398 6 550 0.113 948 6 515		+3
10	0.956 409 5 364		+1	0.262 728	15 021 80	+3	0 700 460		+-5
11	0.951 045 5 645	281 281	-2	0.277 749	14 938 83	-3	0.106.040	~0	+1
13	0.945 400 +5 926	+279	+4+4	0.292 687 -0.307 538	-14 851 67 +93	<del>-4</del> +5	$\begin{bmatrix} 0.120942 & -6441 \\ -0.133383 & \end{bmatrix}$	+39	$-1 \\ -3$
-31	-0.939 474	-79	4	0.30/ 530	1 93	1 , 2	0.100.000	. 39	3

<sup>\*)</sup> AX, AY, AZ sind in Einheiten der 7. Dezimale gegeben.

Op	100	N	Mitt	leres Äquinol	ktiu	m 19	50.0		
Welt-Zeit	X	4	4X*)	Y		<b>△Y*</b> )	Z		<b>∆</b> Z*
1940									
Okt. 13	-0.939 474 <sub>+ 6 205</sub>	+279	+4	-0.307 538 -14 758	+ 93	+5	-0.133 383 <sub>-6 402</sub>	+ 39	-3
14	0.933 269 6 482		-r	0.322 296 14 661		+4	0.139 785 6 359	43	+3
15	0.926 787 6 757		<b>-</b> 5	0.336 957 14 562		-3	0.146 144 6 316	43	-3
16	0.920 030 7 030	272	-4	0.351 519 14 456		+4	0.152 460 6 271	45	-4
17	0.913 000 7 303	272	+2	0.365 975		-3	0.158 731 6 224	47	<b>—</b> 1
18	0.905 697 7 572	200	-3	0.380 323		-2	0.164 955 6 174	50	+4
19	-0.898125 + 7841	1.00-	+2	-0.394 558 <sub>-14 118</sub>		I		+ 51	c
20	0.890 284 8 107	266	0	0.408 676	121	0	0.177 252 6 071	52	<del>-</del> 5
21	0.882 177 8 372	260	+3	0.422 673 13 871		+3	0.183 323 6 016	55	-3
22	0.873 805 8 634		+1	0.436 544 13 741	Y 45 0	+1	0.189 339 5 960	56	
23	0.865 171 8 805	261	+4	0.450 285 13 608	1111	-5	0.195 299 5 002	58	-4
24	0.856 276 9 153	258	+2	0.463 893		-1	0.201 201 5 841	61	
25	-0.847123 + 9416	±257	+5	$-0.477363_{-13327}$	1 740	+3	-0.207 042 <sub>-5 7</sub> 80	+ 6 <b>1</b>	-5
26	0.837 713 9 663	2 = 2	0	0.490 690 13 180		+3	0.212 822 5 716	64	1
27	0.828 050 9 918	252	+4	0.503 870 13 028		+2	0.218 538 5 650	66	+1
28	0.818 135	2.10	+2	0.516 898		5	0.224 188 5 582	68	+:
29	0.807 971 10 400	2.4.5	-2	0.529 771 12 713	160	-4	0.229 770 5 513	69	-:
30	0.797 562 10 653	211	+3	0.542 484 12 548		0	0.235 283 5 442	71	-1
31	-0.786 909 <sub>+10 892</sub>	1 220	-3	-0.555 032 <sub>-12 379</sub>	-160	+1		+ 74	
Nov. 1	0.776 017		-3	0.567 411 12 205	Y 77.4	+3	0.240 093	75	+-2
2	0.764 889	222	-3	0.579 616	T-6	-3	0.251 386	76	(
3	0.753 529 11 590	220	+-3	0.591 645	T 8 2	+3	0.256 603	79	+:
4	0.741 939 11 814	224	-3	0.603 492 11 662	185	0	0.261 741	80	+-2
5	0.730 125	221	0	0.615 154 11 474	188	-4	0.266 799 4 976	82	+3
6	-0.718 090 <sub>+12 253</sub>	+218	+5	-0.626 628 <sub>-11 283</sub>	+191	-5		+ 82	— <u>:</u>
7	0.705 837	274	+4	0.637 911	* ~ 6	+2	0.276 669	85	+3
8	0.693 370 12 676	202	0	0.648 998 10 880	0	0	0.281 478	86	+2
9	0.680 694	200	+3	0.659 887 10 687	202	+2	0.286 201 4 636	87	+-1
10	0.667 811 13 084		-4	0.670 574 10 483	204	-I	0.290 837 4 547	89	
11	0.654 727 13 283	199	0	0.681 057 10 275	208	+2	0.295 384 4 457	90	+3
12	-0.64I 444 +I3 477	+194	-2	-0.691 332 <sub>-10 064</sub>	+211	+3	-0.299 841 -4 365	+ 92	+3
13	0.627 967	191	-1	0.701 396	214	+1	0.304 200	92	<u> </u>
14	0.614 299 13 854	186	<u>-4</u>	0.711 246	216	-5	0.308 479 4 170	94	
15	0.600 445	, 183	0	0.720 880	219	<u>-4</u>	0.312 658 4 084	95	
16	0.586 408 14 216	179	+2	0.730 295 9 192	223	0	0.316 742 3 987	97	+2
17	0.572 192	T 77 C	+3	0.739 487 8 967	225	-2	0.320 729 3 889	98	+-3
18	-0.557 801 <sub>+14 562</sub>	+171	+2	-0.748 454 <sub>- 8 739</sub>	+228	-3	-0.324 618 <sub>-3 790</sub>	+ 99	9
19	0.543 239	167	+1	0.757 193 8 500	230	-5	0.328 408 3 690	100	-:
20	0.528 510	163	$-\mathbf{r}$	0.705 702 8 275	234	+1	0.332 098 3 589	101	-
21	0.513 618	158	-3	°.773 977 <sub>8 028</sub>	237	+3	0.335 687 3 486	103	
22	0.498 568 +15 205		+2	0.782 015 - 7 799	239	—I	0.339 173 -3 382	104	1
23	-0.483 363	+150	+2	-0.789 814 <sup>7 799</sup>	+242	-2	-o.342 555	+105	+

<sup>\*)</sup>  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.

O b			_			Mitt	leres 2	Äqu	inol	ktiu	m 19	50.0				
Welt-Z			X			∆X*)		Y		11.1	4Y*)		Z			∆Z*)
194	.0										1					
Nov.	23	-0.483 3	63	+15 355	+150	+2	-0.789	814	-7 557	+242	2	-0.342	555	277	+105	+3
	24	0.468	800	15 501	146	+3	0.797	371	7 312	245	-I	0.345	822	170	107	+5
	25	0.452 5	07	15 642	141	+3	0.804		7 064	248	-I	0.349	000	063	107	—ī
	26	0.436 8	365	15 778	136	+2	0.811	747	6 814	250	-4	0.352	065	955	108	—r
	27	0.421 0	87	15 910	132	+4	0.818		6 561	253	-I	0.355	020	844	III	+4
	28	0.405 1	77	16 036	126	-ı	0.825	122	6 305	256	+3	0.357	864	734	IIO	-4
	<b>2</b> 9	—0.389 т		⊢16 156	+120	<u>-5</u>	-o.831	427	-6 047	+258	+3	-0.360	598		+111	-4
	30	0.372 9	85.	16 272	116	0	0.837		5 787	260	+2	0.363	221	509	114	+3
Dez.	I	0.356 7		16 382	110	+1	0.843		5 525	262	+2	0.365	730	396	113	-3
	2	0.340 3		16 487	105	+2	0.848		5 261	264	+3	0.368	126	282	114	-5
	3	0.323 8		16 586	99	+1	0.854		4 996	265	+2	0.370	408	167	115	<b>—3</b> .
	4	0.307 2	:58	16 680	94	+3	0.859	043	4 729	267	+3	0.372		052	115	-3
	5	-0.290 5		+16 769	+ 89	+4	-0.863	772	-4 461	+268	+3	-0.374		935	+117	+3
	6	0.273 8	09	16 852	83	0	0.868	233	4 191	270	+3	0.376	562	818	117	0
	7	0.256 9		16 930	78	+1	0.872		3 922	269	-4	0.378		702	116	-4
	8	0.240 0		17 003	73	+2	0.876		3 650	272	+2	0.380	082	583	119	+3
	9	0.223 0		17 071	68	0	0.879		3 378	272	+-2	0.381		466	117	-4
	10	0.205 9		17 133	62	-4	0.883		3 104	274	+5	0.383	131	347	119	- <b>+</b> -I
	11	0.188 8		⊢17 190	+ 57	-4	o.886	478	-2 830	+274	+2	-0.384	478	228	+119	$+\mathbf{r}$
	12	0.171 6	30	17 243	53	0	0.889	308	2 556	274	-2	0.385	700	109	119	+2
	13	0.154 3		17 289	46	-4	0.891		2 280		+2	0.386		989	120	+4
	14	0.137 0		17 332	43	+3	0.894		2 004		+2	0.387		869	120	+2
	15	0.1197		17 369	37	+1	0.896		I 727	277	+2	0.388		749	120	— <b>I</b>
	16	0.102 3		17 401	32	0	0.897		1 450	277	0	0.389		629	120	-2
	17	-0.084 9		⊢17 428	+ 27	-2	<b>−0.</b> 899	3 <sup>2</sup> 5 .	-I 172	+278	0	-0.390		508	+121	+1
	18	0.067 5	68	17 450	22	-3	0.900		894	278	I	0.390		387	121	+1
	19	0.050 1		17 466	16	-5	0.901	-	614		+3	0.390		266	121	0
	20	0.032 6		17 478	12	+2	0.902		335	279	-2	0.391		145	121	0
	21	-0.015 1	74	17 485	7	+5	0.902	340 .	- 55	280	-2	0.391		23	122	+4
	22	+0.002 3		17 486	+ I	+2	0.902			281	0	0.391		99	122	+-4
	23	+0.0197	97 -	⊢17 481	- 5	-2	-0.902	169	+ 506	+280	-3		281 +	221	+122	0
	24	0.037 2	78	17 471	10	0	0.901	663	788	282	+4	0.391		342	121	-5
	25	0.054 7		17 456	15	+2	0.900		1 069	281	+3	0.390		464	122	-1
	26	0.072 2		17 434	22	-3	0.899		1 351	282	+5	0.390		586	122	+3.
	27	0.089 6		17 406	28	-3	0.898	455	1 632	281	$+\mathbf{I}$	0.389		708	122	+5
	28	0.107 0	45	17 374	32	+4	0.896		1 912	280	-2	0.388		830	122	+5
	29	+0.1244	.19	17 335	<b>— 39</b>	0	-o.894	911	2 193	- <b>⊢281</b>	+2	-o.388	130 +	951	+121	0
	30	0.141 7	54	17 290	45	-3	0.892	718		279	-3	0.387	179	072	121	—I
	31	0.1590	44 +	-17 239	51	<u> </u>	0.890	246 _	-2 750	278	-5	0.386	1071	192	120	-2
	32	+0.176 2	83		— <u>5</u> 6	-r	-0.887	496		1-277	-3	-0.384	915		+121	+3

<sup>\*)</sup> AX, AY, AZ sind in Einheiten der 7. Dezimale gegeben.

		_	Мi	ttlere	s Äqu	inoktiu	m 1950	.0		
O <sup>1</sup> Welt-		log r	Helioz. Länge	Red. a. d. Bahn	Helioz. Breite	Oh Welt-Zeit	log r	Helioz. Länge	Red. a. d. Bahn	Helioz. Breite
				1	MERK	UR 1940				
194	.0					1940				
Jan.		9.6337	200.02	-o.13	+2.26	- 1	9.6620	236.15	+0.06	-1.03·
	+2	9.6520	224.43	-0.02	+0.41	T 1.	9.6683	250.05	+0.15	-2.67
	7	9.6637	238.79	+0.08	-1.35	Juli 5	9.6681	263.79	+0.20	-4.13
	12	9.6688	252.63	+0.16	-2.96	15	9.6614	277.80	+0.21	-5.38
	17	9.6674	266.38	+0.21	-4.39	20	9.6480	292.53	+0.17	-6.34
	22	9.6594							- 1	
	27	9.6594	280.49	+0.21	-5.58	25	9.6280	308.48	+0.07	-6.91
Febr		9.6235	295.41 311.66	+0.15	-6.48 $-6.97$	30	9.6014	326.27	-0.06 -0.18	-6.93 $-6.14$
1.001	6	9.5958	329.87	-0.09	-6.85	Aug. 4		10.27	-0.18	-4.28
	11	9.5630	350.78	-0.20	-5.88	9	9.5350 9.5048	37.63	-0.21	-1.24
					_	14				
	16	9.5287	15.12	-0.19	-3.79	19	9.4886	68.11	+0.14	+2.45
	21	9.5004	43.16	-0.03	-0.56	24	9.4938	99.55	+0.21	+5.51
Männ	26	9.4879	74.03	+0.17	+3.11	29	9.5178	129.09	+0.06	+6.92
März		9.4971	105.32	+0.19	+5.92	Sept. 3	9.5511	154.94	-0.12	+6.69
	7	9.5237	134.24	+0.03	+6.99	8	9.5850	176.96	-0.21	+5.44
	12	9.5576	159.35	-0.15	+6.52	13	9.6147	195.87	-0.19	+3.73
	17	9.5910	180.72	-0.21	+5.14	18	9.6382	212.51	-o.rr	+1.85
	22	9.6196	199.14	-o.18	+3.37	23	9.6551	227.63	0.00	+0.01
	27	9.6419	215.44	-0.09	+1.50	28	9.6654	241.84	+0.10	-1.71
April	1	9.6576	230.35	+0.02	-0.32	Okt. 3	9.6690	255.62	+o.18	-3.29
	6	9.6665	244.45	+0.12	-2.02	8	9.6662	269.42	+0.21	-4.67
	II	9.6690	258.20	+0.19	-3.56	13	9.6568	283.67	+0.20	-5.81
	16	9.6649	272.05	+0.21	-4.90	18	9.6407	298.83	+0.13	-6.63
	21	9.6543	286.43	+0.19	-5.99	23	9.6180	315.44	+0.02	-7.00
	26	9.6369	301.81	+0.11	-6.74	28	9.5890	334.18	-o.12	-6.72
Mai	I	9.6130	318.78	0.01	-7.00	Nov. 2	9.5554	355.79	0.21	-5·53
2.1.001	6	9.5829	337.99	-0.14	6.58	7	9.5334	20.93	-0.17	-3.17
	11	9.5489	0.22	-0.21	-5.18	12	9.4960	49.72	+0.01	+0.24
	16	9.5159	26.07	-0.15	-2.60	17	9.4881	80.93	+0.20	+3.85
	21	9.4929	55.46	+0.06	+0.94	22	9.5018	111.92	+o.17	+6.31
	26	9.4891	86.86		, ,		, ,		-0.02	+7.00
		1	117.48	+0.21	+4.43	Dog 27	9.5308	140.07 164.32		+6.27
Juni	31	9.5064 9.5371	117.48	+0.14	+6.57 +6.95	Dez. 2	9.5652	184.97	-0.17 -0.21	+4.77
ouni	10	9.5716	168.44	-0.05		7	9.5977 9.6250	202.85	-0.21 -0.16	+2.96
	15	9.5710	188.51	-0.19 -0.21	+6.03	12		218.80	-0.10 -0.07	+1.09
		, 00			+4.44	17	9.6459			1
	20	9.6295	205.97	-o.15	+2.61	22	9.6601	233.49	+0.04	-0.70
	25	9.6491	221.63	-0.05	+0.75	27	9.6676	247.47	+0.14	-2.37
	30	9.6620	236.15	+0.06	-1.03	32	9.6687	261.20	+0.20	-3.87

 $\Omega = 47.739$  i = 7.004  $m = \frac{1}{6000000}$ 

Mittleres Äquinoktium 1950.0

O h Welt-Zei	t	Julian. Zeit	log r	Helioz. Länge	Red. auf d. Bahn	Heliozentr. Breite	log R	Länge
				VENU	S 1940		ERDE	1940
1940					in 0.001	0	-	
Jan.	8	2429 620.5	9.86201	335.030	+10	-3.329	9.99282	90.392
	+2	630.5	9.86157	350.897	<b>- 8</b>	-3.383	9.99267	100.583
	12	640.5	9.86096	6.800	-33	-3.179	9.99275	110.775
	22	650.5	9.86023	22.743	-48	-2.730	9.99305	120.958
Febr.	1	660.5	9.85942	38.728	-49	-2.069	9.99357	131.121
	11	2429 670.5	9.85861	54.759	-34	-1.245	9.99427	141.257
	21	680.5	9.85784	70.839	- 9	-0.321	9.99515	151.355
März	2	690.5	9.85720	86.966	+18	+0.631	9.99618	161.409
	12	700.5	9.85671	102.143	+40	+1.536	9.99731	171.413
	22	710.5	9.85644	119.360	+50	+2.321	9.99852	181.363
April	1	2429 720.5	9.85639	135.606	+-44	+2.921	9.99976	191.257
	II	730.5	9.85658	151.860	+24	+3.288	0.00101	201.095
	21	740.5	9.85698	168.100	- 3	+3.393	0.00222	210.877
Mai	1	750.5	9.85756	184.301	-30	+3.228	0.00335	220.606
	11	760.5	9.85829	200.445	-47	+2.809	0.00439	230.286
	21	2429 770.5	9.85909	216.517	-49	+2.171	0.00530	239.923
	31	780.5	9.85991	232.513	-37	+1.368	0.00605	249.523
Juni	10	790.5	9.86068	248.439	-14	+0.462	0.00663	259.093
	20	800.5	9.86135	264.309	+14	<b>-0.47</b> 6	0.00701	268.642
	30	810.5	9.86186	280.139	+37	-1.376	0.00720	278.179
Juli	10	2429 820.5	9.86218	295.949	+49	-2.169	0.00718	287.712
	20	830.5	9.86228	311.759	+47	-2.798	0.00696	297.250
	30	840.5	9.86216	327.584	+30	-3.216	0.00654	306.803
Aug.	9	850.5	9.86182	343.435	+ 5	-3.390	0.00593	316.378
	19	860.5	9.86129	359.319	-22	-3.307	0.00515	325.983
	29	2429 870.5	9.86061	15.241	-43	-2.970	0.00422	335.627
Sept.	8	880.5	9.85983	31.204	<u>-50</u>	-2.404	0.00316	345.315
	18	890.5	9.85900	47.212	-43	-1.649	0.00201	355.053
	28	900.5	9.85820	63.267	-22	-0.764	0.00079	4.844
Okt.	8	910.5	9.85749	79.371	+ 6	+0.185	9.99954	14.691
	18	2429 920.5	9.85692	95.526	+31	+1.121	9.99830	24.595
	28	930.5	9.85653	111.725	+48	+1.971	9.99710	34.555
Nov.	7	940.5	9.85637	127.960	+49	+2.665	9.99598	44.568
	17	950.5	9.85644	144.214	+35	+3.147	9.99498	54.631
	27	960.5	9.85674	160.465	+10	+3.377	9.99413	64.736
Dez.	7	2429 970.5	9.85725	176.689	—ı8	+3.338	9.99346	74.877
	17	980.5	9.85791	192.863	<b>-40</b>	+3.036	9.99298	85.045
	27	2429 990.5	9.85869	208.971	<del>-50</del>	+2.495	9.99272	95.231
			$\Omega$	= 76°.23°	i	= 3.394		
				m = -	11		m = -	I
		İ		,,,,	४०४ ०००			329 390

			Mittle	res Ä	quinok	tium 195	0.0		
O <sup>h</sup> Welt-Z	eit	log r .	Helioz. Länge	Red. a. d. Bahn	Helioz. Breite	log r	Helioz. Länge	Red. a. d. Bahn	Helioz. Breite
			MARS	1940	11102	J	UPITEI	3 1940	
1940				in 0.001				in 0.0001	
Jan.	-8	0.15890	34.478	— 7	_0.470	0.694580	11.8097	- 5	-1.3070
0 00231	+2	0.16237	40.256	5	0.288	0.694566	12.7270	7	1.3061
	12	0.16598	45.941	— 2	-0.105	0.694558	13.6443	10	1.3049
	22	0.16968	51.531	+ 1	+0.075	0.694555	14.5617	12	1.3034
Febr.	1	0.17344	57.025	4	0.252	0.694556	15.4791	14	1.3016
	II	0.17722	62.425	+ 7	+0.423	0.694563	16.3965	-17	-1.2994
	21	0.18098	67.732	9	0.588	0.694575	17.3138	19	1.2969
März	2	0.18469	72.949	11	0.746	0.694593	18.2310	21	1.2941
2.2022	12	0.18832	78.079	13	0.894	0.694616	19.1482	23	1.2909
	22	0.19185	83.125	14	1.033	0.694644	20.0653	26	1.2874
April	I	0.19526	88.091	+15	+1.162	0.694676	20.9823	-28	-1.2835
•	11	0.19851	92.983	15	1.281	0.694714	21.8991	30	1.2793
	21	0.20160	97.803	15	1.389	0.694757	22.8157	32	1.2748
Mai	1	0.20451	102.558	14	1.485	0.694805	23.7321	34	1.2700
	11	0.20723	107.252	13	1.571	0.694859	24.6483	36	1.2648
	21	0.20973	111.891	+12	+1.645	0.694918	25.5643	-39	-1.2593
	31	0.21201	116.478	11	1.707	0.694982	26.4800	41	1.2535
Juni	10	0.21407	121.021	9	1.758	0.695051	27.3954	43	1.2474
	20	0.21589	125.523	7	1.798	0.695126	28.3105	44	1.2410
	30	0.21747	129.990	_ 5	1.827	0.695206	29.2253	46	1.2343
Juli	10	0.21881	134.428	+ 2	+1.845	0.695290	30.1398	-48	-1.2273
	20	0.21989	138.841	0	1.851	0.695379	31.0539	50	1.2199
	30	0.22072	143.234	<b>—</b> 2	1.846	0.695473	31.9676	52	1.2122
Aug.	9	0.22129	147.614	4	1.831	0.695572	32.8809	53	1.2043
	19	0.22160	151.984	6	1.805	0.695676	33.7938	55	1.1961
	29	0.22165	156.351	- 8	+1.769	0.695784	34.7062	<b>—57</b>	-1.1875
Sept.	8	0.22144	160.719	10	1.722	0.695898	35.6181	58	1.1786
	18	0.22098	165.093	12	1.665	0.696016	36.5295	60	1.1694
	28	0.22026	169.480	13	1.598	0.696139	37-4404	6 <b>1</b>	1.1599
Okt.	8	0.21928	173.883	14	1.522	0.696267	38.3508	62	1.1502
	18	0.21805	178.308	-15	+1.436	0.696400	39.2607	64	-1.1402
	28	0.21657	182.761	15	1.341	0.696537	40.1700	65	1.1299
Nov.	7	0.21484	187.247	15	1.237	0.696679	41.0787	66	1.1193
	17	0.21288	191.770	14	1.125	0.696825	41.9868	67	1.1084
	27	0.21069	196.336	14	1.005	0.696976	42.8942	68	1.0973
Dez.	7	0.20828	200.951	-12	+0.876	0.697131	43.8010	-69	-1.0859
	17	0.20565	205.619	11	0.741	0.697291	44.7071	70	1.0742
	27	0.20282	210.346	- 9	+0.598	0.697455	45.6125	<del>-70</del>	-1.0623
		Ω=	49°172	i = 1	:850	Ω	= 99°9528	$i = 1^{\circ}.3$	059

1047.35

О ь		Julian. Zeit	log r	Heliozentrische	Red. auf	Heliozentrisch
Welt-Zeit	;	ounan. Zen		Länge	die Bahn	Breite
			SATUR	N 1940	in 0.0001	
939 Dez.	2	2429 600.5	0.968110	29.4192	- 58	0
939 Dez. 940 Jan.	3	640.5	0.967623	30.8336	_	-2.4725 $2.4652$
Febr.	21	680.5	0.967141	32.2512	71 84	2.4563
April	I	720.5	0.966664	33.6719	- 96	-2.4459
Mai	II	760.5	0.966193	35.0956	100	2.4340
Juni	20	800.5	0.965729	36.5224	121	2.4206
Juli	30	840.5	0.965271	37.9522	-133	-2.4056
Sept.	8	880.5	0.964820	39.3850	145	2.3891
Okt.	18	920.5	0.964376	40.8207	156	2.3710
Nov.	27	2429 960.5	0.963938	42.2592	-167	1
2101.	21		0	т.	10/	-2.3515
		$\langle \zeta \rangle = 1$	13.2251 $i=2$	.4903 $m = \frac{1}{3.50}$	1.6	
			URANU	S 1940		
A = 0.1		d		0	in 0.001	0
939 Dez.	3	2429 600.5	1.29260	50.311	_ 2	-0.309
940 Jan.	12	640.5	1.29246	50.761	2	0.303
Febr.	21	680.5	1.29232	51.211	2	0.297
April	I	720.5	1.29218	51.662	- 2	-0.292
Mai	II	760.5	1.29204	52.113	2	0.286
Juni	20	800.5	1.29190	52.564	2	0.280
Juli	30	840.5	1.29175	53.015	_ 2	-0.275
Sept.	8	880.5	1.29161	53.467	2	0.269
Okt.	18	920.5	1.29146	53.919	2	0.263
Nov.	27	2429 960.5	1.29132	54.371	— 2	-0.258
		$\mathcal{U} =$	73.745 $i = \circ$ .	773 $m = \frac{1}{22.86}$	<u> </u>	
			NEPTU	N 1940		
n.	1	đ	0	0	in 0.001	0
939 Dez.	3	2429 600.5	1.48036	173.671	+ 14	-+1.198
940 Jan.	12	640.5	1.48037	173.907	14	1.203
Febr.	21	680.5	1.48039	174.144	14	1.208
April	I	720.5	1.48040	174.380	+ 14	+1.214
Mai	II	760.5	1.48042	174.616	14	1.219
Juni	20	800.5	1.48043	174.852	14	1.225
Juli	30	840.5	1.48045	175.088	+ 14	+1.230
Sept.	8	880.5	1.48046	175.324	14	1.235
Okt.	18	920.5	1.48048	175.560	14	1.240
Nov.	27	2429 960.5	1.48049	175.796	+ 14	+1.246
		$\mathcal{O} = 13$		193	14	
	1	, 1	PLUTC		in 0.001	-
939 Okt.	24	2429 560.5	1.59028	121.564	+538	+3.651
940 Jan.	12	640.5	1.58967	121.868	550	3.743
April	I	720.5	1.58906	122.173	563	3.834
Juni	20	800.5	1.58845	122.479	576	3.926
Sept.	8	880.5	1.58784	122.786	589	4.018
Nov.	27	2429 960.5	1.58722	123.094	+602	+4.110

# Mittlere und Scheinbare Sternörter 1940

Reduktionsgrößen

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o <sup>§</sup> ooo1	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oot
905	[2 Ceti]	4.62 2.15	Ао Аор	h m s o o 40.020 o 5 16.833	+3.0735 +3.1004	+ 16 + 103	-17 40 11.70 +28 45 33·33	+20.041 +19.879	- 2 - 159
2	β Cassiopeiae	2.42	F <sub>5</sub>	0 5 57.715	+3.1004	+ 674	+58 49 8.15	+19.859	- 178
3	ε Phoenicis	3.94	Ko	0 6 22.325	+3.0470	+ 127	-46 4 41.94	+19.865	- 170
4	[22 Androm.]	5.08	Fo	0 7 11.555	+3.1166	+ 3	+45 44 18.50	-+20.036	+ 3
5	[×2 Sculptoris]	5.56	Ko	0 8 31.760	+3.0473	+ 8	-28 8 I.67	+20.055	+ 25
6	[9 Sculptoris]	5.19	F 5	0 8 41.156	+3.0498	+ 129	-35 28 $7.51$	+20.165	+ 136
7	γ Pegasi	2.87	В 2	0 10 8.554	+3.0889	+ 1	+14 51 0.41	+20.017	- 6
8	$\dagger [\operatorname{Br} 6 \operatorname{Ceph} m]$	6.23	В 9	0 12 47.546	+3.3916	+ 42	+76 37 3.23	+20.017	+ 5
9	ι Ceti	3.75	Ко	0 16 22.219	+3.0565	- 12	- 9 9 22.85	+19.965	27
10	ζ Tucanae	4.34	F 8	0 16 57.484	+3.1303	+2716	-65 13 37.98	+21.161	+1173
11	β Hydri	2.90	Go	0 22 37.834	+3.1659	+6921	-77 35 31.15	+20.274	+ 329
12	α Phoenicis	2.44	Ko	0 23 19.376	+2.9670	+ 190	-42 37 53.66	+19.556	- 384
13	12 Ceti [49 G. Ceti]	6.04	K 5	0 26 58.545	+3.0619	+ 6	- 4 17 18.86	+19.901 +19.922	- 3 + 22
14	_	5.23	A 3	0 27 22.747	+2.9999		-24 7 9.64		
15	[\lambda^1 Phoenicis]	4.88	A 2	0 28 31.636	+2.8958	+ 145	-49 8 6.2I	+19.918	+ 30
16	[κ Cassiopeiae]   ζ Cassiopeiae	4.24	Во Вз	0 29 34.230	+3.4047	— 5	+62 36 3.47	+19.880 +19.822	+ 3 - 6
17 18	π Androm.	3.72 4.44	В 3	o 33 36.896 o 33 40.144	+3.3396 +3.2033	+ 17	+53 34 1.22 $+33$ 23 21.54	+19.822 $+19.827$	- 6
19	[ε Androm.]	4.52	G 5	0 35 22.711	+3.1694	- 176	+28 59 10.73	+19.558	- 247
20	δ Androm.	3.49	K 2	0 36 6.769	+3.2073	+ 104	+30 31 58.51	+19.707	- 88
21	α Cassiopeiae	2.47	Ко	0 37 5.259	+3.4010	+ 60	+56 12 31.14	+19.753	- 28
22	β Ceti	2.24	Ко	0 40 34.703	+3.0117	+ 165	-18 18 56.25	+19.769	+ 40
23	[	4.53	Αo	0 40 39.869	-+2.6989	+ 4	-57 47 30.38	+19.750	+ 21
26	[λ <sup>2</sup> Sculptoris]	5.97	Κo	0 41 18.196	+2.9009	+ 201	$-38 \ 45 \ 6.79$	+19.845	+ 127
25	o Cassiopeiae	4.70	В 2	0 41 22.221	-+3.3411	+ 17	+47 57 22.90	+19.714	- 3
24	21 Cassiopeiae	5.59	A 2	0 41 38.823	+3.9492	— <sub>52</sub>	+74 39 37.83	+19.693	- 20
27	ζ Androm.	4.30	Ко	0 44 9.163	+3.1793	<b>—</b> 75	+23 56 28.09	+19.596	- 76
28	[8 Piscium]	4.55	K 5	0 45 33.983	+3.1123	+ 55	+ 7 15 31.96	+19.603	- 45
31	[λ Hydri]	4.96	K 5	0 46 30.916	+2.0854	+ 355	-75 14 59·37	+19.608	- 24
29	[Br 82 Cass]	5.45	+ A 2	0 47 3.886	+3.6342	+ 39	+63 55 16.79	-+19.615	6
30	[φ <sup>2</sup> Ceti]	5.24	F 5	0 47 7.236	+3.0046	— <b>1</b> 57	—10 58 1.43	+19.401	220
34	[\lambda^2 Tucanae]	5.34	Ko	0 52 46.223	+2.2438	+ 20	-69 5I 4·53	+19.478	36
32	γ Cassiopeiae μ Androm.	2.25	Bop A 2			+ 28	+60 23 32.36 +38 10 27.68	+19.506 +19.538	— 2 — 27
33		3.94		0 53 24.857	+3.3286	+ 127			+ 37
35	α Sculptoris ε Piscium	4.39	В <sub>5</sub> Ко	0 55 42.963	+2.8909	+ 12	-29 40 52.80	+19.461	+ 7
36 37	[26 Ceti]	4·45 6.07	Fo	0 59 49.560 1 0 43.586	+3.1135 +3.0873	- 54 + 78	+ 7 34 3.20 + I 2 44.4I	+19.393 +19.307	+ 30
38	† $\beta$ Phoenicis $m$	3.35	Ко	I 3 24.57I	+3.6781	- 70 - 29	-47 2 22.37	+19.307	+ 9
39	[i Tucanae]	5.32	Ко	I 4 56.347	+2.3784		-62 5 43.24		_

A\* 40

Nr.	N a m e	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o‱ooi	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oo1
40 42 41 43 44	[η Ceti] β Androm. [44 H. Cephei] [τ Piscium] [102 G. Sculpt.]	3.60 2.37 5.68 4.70 5.91	Ко Мо Ао Ко А 5	h m 8 I 5 34.245 I 6 21.871 I 7 0.545 I 8 20.922 I 9 59.667	+3.0179 +3.3580 +5.1569 +3.3031 +2.7640	+ 147 + 146 + 325 + 53 + 69	-10 29 59.27 +35 18 10.72 +79 21 19.33 +29 46 17.88 -38 10 26.33	+19.100 +19.096 +19.193 +19.126 +19.091	$ \begin{array}{c c} -128 \\ -112 \\ + 2 \\ - 32 \\ - 24 \end{array} $
45 47 46 48 49	υ Piscium  ϑ Ceti [ψ Cassiopeiae]  ϑ Cassiopeiae [γ Phoenicis]	4.67 3.83 4.96 2.80 3.40	A 2 Ko Ko A 5 K 5	I 16 9.719 I 21 1.380 I 21 39.850 I 21 52.249 I 25 45.702	+3.2965 +2.9986 +4.2295 +3.9199 +2.6059	+ 16 - 54 + 126 + 396 - 16	+26 56 57.34 - 8 29 32.85 +67 49 3.55 +59 55 27.10 -43 37 30.10	+18.937 +18.587 +18.814 +18.731 +18.458	- 9 -216 + 30 - 46 -198
50 53 51 52 54	η Piscium [14 G. Hydri] 40 Cassiopeiae 51 Androm. α Eridani	3.72 6.06 5.50 3.77 0.60	G 5 G 5 K 0 K 0 B 5	I 28 16.089 I 33 13.965 I 33 40.531 I 34 17.809 I 35 28.938	+3.2098 +0.3937 +4.7793 +3.6803 +2.2356	+ 18 - 74 - 36 + 66 + 127	+15 2 13.62 -78 48 32.88 +72 44 6.76 +48 19 30.16 -57 32 27.62	+18.571 +18.290 +18.380 +18.261 +18.305	- 3 -118 - 10 -109 - 23
55 56 58 57 59	43 Cassiopeiae [ν Piscium] [129 G. Sculpt.] φ Persei τ Ceti	5.54 4.68 5.64 4.19 3.65	Aop Ko Ao Bop Ko	I 37 51.958 I 38 18.330 I 39 24.288 I 39 53.147 I 41 16.790	+4.4345 +3.1219 +2.6439 +3.7575 +2.7873	+ 86 - 17 - 39 + 26 -1192	+67 44 26.04 + 5 11 4.86 -37 8 3.95 +50 23 14.44 -16 15 10.15	+18.239 +18.233 +18.168 +18.157 +18.975	- 3 + 7 - 19 - 11 +858
60 61 62 64 63	o Piscium ε Sculptoris ζ Ceti α Trianguli ε Cassiopeiae	4.50 5.39 3.92 3.58 3.44	Ko Fo Ko F 5 B 3	I 42 I3.288 I 42 50.150 I 48 29.832 I 49 39.238 I 50 3.199	+3.1678 +2.8102 +2.9612 +3.4190 +4.3090	+ 48 + 117 + 25 + 8 + 40	+ 8 51 23.47 -25 21 6.41 -10 37 50.67 +29 17 14.58 +63 22 32.40	+18.136 +18.007 +17.805 +17.561 +17.758	$   \begin{array}{r}     + 54 \\     - 52 \\     - 33 \\     -231 \\     - 17   \end{array} $
65 67 66 69 68	ξ Piscium ψ Phoenicis β Arietis [η² Hydri] χ Eridani	4.84 4.41 2.72 4.72 3.73	Ko M3 A5 Ko G5	1 50 26.776 1 51 14.523 1 51 19.196 1 53 24.710 1 53 37.470	+3.1058 +2.4057 +3.3134 +1.5199 +2.3356	+ 14 - 82 + 68 + 128 + 734	+ 2 53 31.66 -46 35 45.20 +20 30 55.97 -67 56 31.09 -51 54 24.87	+17.788 +17.648 +17.616 +17.726 +17.931	+ 28 - 79 - 108 + 87 + 301
72 71 70 73 74	α Hydri υ Ceti 50 Cassiopeiae γ Androm. pr α Arietis	3.02 4.18 4.06 2.28 5.08 2.23	F o M o A 2 K o A o K 2	1 56 52.777 1 57 10.636 1 58 15.913 2 0 12.360 2 3 47.096	+1.8909 +2.8266 +5.1090 +3.6811 +3.3812	+ 375 + 93 - 104 + 44 + 138	-61 51 40.32 -21 22 4.05 +72 7 56.40 +42 2 34.18 +23 10 46.70	+17.532 +17.463 +17.459 +17.301 +17.045	+ 40 - 16 + 28 - 47 - 144
75 77 76 78 79	β Trianguli [Br 299 Andr] 55 Cassiopeiae μ Fornacis [γ Trianguli]	3.08 5.40 6.15 5.24 4.07	A 5 K 0 F 5 + A 2 A 0 A 0	2 5 57.878 2 9 36.018 2 9 44.637 2 10 15.946 2 13 44.335	+3.5686 +3.9875 +4.6999 +2.6422 +3.5653	+ 119 + 366 - 23 + 14 + 35	+34 42 16.10 +50 47 17.69 +66 14 40.36 -31 0 16.17 +33 34 14.88	+17.052 +16.756 +16.914 +16.903 +16.681	- 38 \ -165 \ 0 \ + 12 \ - 44

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o:ooo1	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o!'001
80 82 81 83 84	67 Ceti [φ Eridani] [ϑ Arietis] [κ Fornacis] [λ Horologii]	5.70 3.78 5.69 5.37 5.47	G 5 B 8 A 0 F 5 F 2	2 13 59.323 2 14 21.955 2 14 46.951 2 19 47.796 2 23 13.146	+2.9925 +2.1437 +3.3366 +2.7455 +1.6774	+ 60 + 98 - 9 + 147 - 95	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	+16.608 +16.679 +16.677 +16.373 +16.130	-105 - 16 + 3 - 55 -125
86 85 88 87 90	[κ Eridani] ξ² Ceti [λ¹ Fornacis] 36 H. Cassiop. μ Hydri	4·44 4·34 5·88 5·34 5·29	В 5 А 0 К 0 К 0	2 24 47.156 2 24 57.890 2 30 36.870 2 32 16.727 2 32 53.651	+2.1996 +3.1894 +2.5015 +5.6886 -1.2855	+ 21 + 25 - 19 - 80 + 460	-47 58 20.72 + 8 11 31.71 -34 54 47.15 +72 33 27.79 -79 22 17.05	+16.173 +16.162 +15.851 +15.799 +15.711	- I - 2 - I7 + 23 - 36
89 91 95 92 94	ν Arietis δ Ceti [ε Hydri] [Br 366 Cass] [35 Arietis]	5.36 4.04 4.26 5.84 4.58	A 2 B 2 B 9 A 2 B 3	2 35 24.191 2 36 24.233 2 38 39.569 2 39 37.912 2 39 55.442	+3.4059 +3.0748 +0.9224 +5.1530 +3.5198	- 9 + 7 + 171 + 23 + 5	+2I 42 II.I3 + o 4 I4.69 -68 3I 24.97 +67 34 I7.I4 +27 27 II.02	+15.595 +15.556 +15.444 +15.343 +15.352	- 13 + 3 + 16 - 29 - 5
93 96 97 98 99	Persei †[γ Ceti] π Ceti μ Ceti [η Persei]	4.22 3.58 4.39 4.36 3.93	F 8 A 2 B 5 F 0 K 0	2 40 5.305 2 40 11.312 2 41 15.919 2 41 41.666 2 46 18.165	+4.0954 +3.1084 +2.8551 +3.2427 +4.3730	+ 344 - 95 - 6 + 190 + 22	+48 58 33.95 + 2 59 2.30 -14 6 42.66 + 9 51 42.85 +55 38 52.89	+15.264 +15.195 +15.271 +15.227 +14.982	- 83 -147 - 11 - 30 - 10
100 101 102 103 104	41 Arietis β Fornacis τ² Eridani τ Persei η Eridani	3.68 4.50 4.81 4.06 4.05	B8 K0 K0 G0 +A5	2 46 26.718 2 46 34.733 2 48 18.940 2 49 59.330 2 53 29.649	+3.53°5 +2.5112 +2.7212 +4.25°9 +2.93°9	+ 49 + 72 - 36 + 3 + 53	+27 0 51.92 -32 39 25.09 -21 15 1.46 +52 31 6.30 - 9 8 9.14	+14.871 +15.140 +14.857 +14.774 +14.354	-113 +164 - 18 - 2 -214
106 105 107 108 109	<ul> <li>Φ Eridani pr</li> <li>47 H. Cephei</li> <li>α Ceti</li> <li>γ Persei</li> <li>*ρ Persei</li> </ul>	3.42 4.42 5.66 2.82 3.08 var.	A 2 Mo Mo F 5 + A 3 M 3	2 55 59.124 2 58 1.311 2 59 8.387 3 0 26.144 3 1 19.349	+2.2745 +7.9648 +3.1359 +4.3423 +3.8432	- 46 - 137 - 6 + 1 + 111	-40 32 39.22 +79 II 3.72 + 3 5I 19.82 +53 16 23.07 +38 36 33.10	+14.444 +14.300 +14.151 +14.141 +13.985	+ 26 + 11 - 73 - 2 -104
113 110 111 112 114	[θ Hydri] μ Horologii *β Persei [ι Persei] δ Arietis	5.52 5.16 var. 4.17 4.53	B 8 F 0 B 8 G 0 K 0	3 2 7.059 3 2 II.777 3 4 I5.330 3 4 43.415 3 8 II.574	+0.1212 +1.4129 +3.9023 +4.3273 +3.4302	+ 65 - 101 + 6 +1296 + 107	-72 8 12.11 -59 58 11.41 +40 43 33.59 +49 23 8.94 +19 30 3.97	+14.064 +13.983 +13.908 +13.800 +13.651	+ 23 - 52 + 3 - 75 - 4
117 116 118 115	†α Fornacis [94 Ceti] [38 G. Horol.] 48 H. Cephei [82 G. Erid]	3.95 5.14 5.72 5.50 4.30	F 8 F 8 N 0 F 0 G 5	3 9 31.262 3 9 42.538 3 11 1.738 3 12 37.856 3 17 31.883	+2.5484 +3.0619 +1.5187 +7.5912 +2.3959	+ 253 + 131 + 11 + 196 +2786	-29 13 21.35 - 1 25 9.50 -57 32 44.03 +77 31 1.95 -43 17 53.37	+14.217 +13.499 +13.491 +13.311 +13.801	+646 - 59 + 17 - 55 +755

Nr. 109. Größe: Max. 3.3, Min. 4.1. Nr. 111. Größe: Max. 2.3, Min. 3.5.

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o <sup>8</sup> 0001	Dekl. 1940.0	Jährl. Verände- rung	Jähri. Eigen- bew. in o!oor
120 121 123 122 124	α Persei o Tauri [ξ Tauri] 2 H. Camelop. [σ Persei]	1.90 3.80 3.75 4.42 4.55	F 5 G 5 B 8 B 9 p K o	3 20 1.619 3 21 34.836 3 23 54.810 3 24 11.473 3 26 19.984	+4.2812 +3.2284 +3.2513 +4.8540 +4.2283	+ 30 - 45 + 39 - 2 + 8	+49 38 57.66 + 8 49 8.56 + 9 31 29.61 +59 43 59.36 +47 47 23.38	+12.857 +12.704 +12.586 +12.597 +12.476	- 22 71 32 0 +- 24
125 126 127 128 130	5 Tauri [\times Reticuli] \( \times Eridani \) [45 G. Horol.] [110 G. Erid]	4.28 4.80 3.81 5.60 4.58	Ko F 5 Ko Ko	3 27 33·384 3 28 19·434 3 30 6·089 3 30 47·217 3 34 56·379	+3.3122 +1.0459 +2.8266 +1.7875 +2.1526	+ 15 +549 -660 + 75 - 13	+12 43 56.76 -63 8 54.64 - 9 39 36.73 -50 34 53.33 -40 28 13.84	+12.372 +12.698 +12.213 +12.233 +11.832	+ 3 +381 + 20 + 87 - 23
129 131 133 135 132	[Grb 716 Caml]  8 Persei [8 Fornacis] [8 Eridani]  †[0 Persei]	5·3 <sup>2</sup> 3·10 4·93 3·7 <sup>2</sup> 3·94	Mo B 5 B 5 Ko B 1	3 36 55.620 3 38 38.532 3 39 51.617 3 40 22.304 3 40 32.974	+5.2009 +4.2700 +2.3860 +2.8742 +3.7616	$ \begin{array}{c c} -27 \\ +31 \\ 0 \\ -63 \\ +7 \end{array} $	+63 I 27.72 +47 35 50.98 -32 7 44.34 - 9 57 55.09 +32 5 59.19	+11.729 +11.559 +11.524 +12.214 +11.445	+ 17 - 32 + 19 +746 - 9
134 136 137 141 139	v Persei [17 Tauri] [24 Eridani] β Reticuli η Tauri	3.93 3.81 5.09 3.80 2.96	F 5 B 5 p B 8 K o B 5 p	3 41 6.531 3 41 18.430 3 41 27.473 3 43 26.398 3 43 54.759	+4.0749 +3.5622 +3.0472 +0.7501 +3.5659	- 8 + 15 o +481 + 15	+42 23 26.68 +23 55 34.43 - 1 21 3.83 -64 59 43.20 +23 55 16.02	+11.414 +11.359 +11.386 +11.331 +11.169	- 41 - 3 + 83 - 44
138 140 142 143 146	γ Camelop. τ <sup>6</sup> Eridani [27 Tauri] 138 G. Eridani γ Hydri	4.67 4.33 3.80 4.24 3.17	A o F 8 B 8 K o M o	3 43 59·29° 3 44 15·907 3 45 35·355 3 47 12·437 3 48 8·793	+6.3224 +2.5812 +3.5670 +2.2450 -0.9352	+ 38 -116 + 13 - 43 +129	+71 9 0.27 -23 25 32.97 +23 52 17.35 -36 22 51.19 -74 25 23.70	+11.166 +10.664 +11.048 +10.929 +11.026	- 38 -524 - 43 - 44 +-120
144 145 147 148 149	ζ Persei †*9 H. Camel. ε Persei ξ Persei γ Eridani	2.91 5.22 2.96 4.05 3.19	B I K o + A o B I O e 5 K 5	3 50 21.252 3 52 0.205 3 53 49.181 3 55 3.901 3 55 13.691	+3.7708 +5.1118 +4.0251 +3.8923 +2.7993	+ 7 - 5 + 18 + 4 + 44	+31 42 25.41 +60 56 7.20 +39 50 18.10 +35 37 12.73 -13 40 40.67		- 10 - 12 - 26 - 1 - 108
150 151 153 152 154	*\lambda Tauri \(\sim \text{Tauri}\) [174 G. Erid] 48 Persei 01 Eridani	var. 3.94 5.57 4.03 4.14	B 3 A 0 A 5 B 3 p F 2	3 57 21.141 3 59 57.668 4 3 8.969 4 4 17.758 4 8 56.058	+3.3238 +3.1912 +2.4731 +4.3544 +2.9287	- 4 + 1 +153 + 24 + 6	+12 19 20.08 + 5 49 27.45 -27 48 53.37 +47 33 15.40 - 6 59 33.66	+10.209 +10.024 + 9.886 + 9.664 + 9.421	- II - I - IO5 - 27 + 86
155 156 157 160 159	α Horologii α Reticuli [γ Doradus] †υ⁴ Eridani m [γ Tauri]	3.83 3.36 4.36 3.59 3.86	Ko G 5 F 5 B 9 Ko	4 12 0.687 4 13 38.798 4 14 27.119 4 15 37.328 4 16 22.509	+1.9876 +0.7717 +1.5716 +2.2702 +3.4142	+ 32 + 61 +107 + 48 + 81	-42 26 28.87 -62 37 25.05 -51 38 13.72 -33 56 37.43 +15 29 3.49	+ 8.893 + 9.023 + 9.099 + 8.812 + 8.732	-204 + 53 +192 - 3 - 23

Nr. 145. Doppelstern, Größe der Komponenten: 5.0 und 8.2. Nr. 150. Größe: Max. 3.3, Min. 4.2.

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o!ooor	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oor
158 161 162 163 166	[54 Persei] [212 G. Erid] 8 Tauri [9 Reticuli] [8 Mensae]	5.10 5.31 3.93 5.18 5.62	G 5 A 0 K 0 K 0 K 0 p	h m 8 4 16 30.509 4 18 1.877 4 19 28.248 4 21 14.071 4 21 58.963	+3.8951 +2.6173 +3.4599 +0.6479 -4.0682	- 20 + 19 + 76 +128 +128	+34 25 25.02 -20 46 53.59 +17 24 12.18 -63 31 42.47 -80 21 22.54	+8.738 +8.616 +8.483 +8.547 +8.385	- 6 - 8 - 27 +175 + 69
164	ε Tauri	3.63	Ко	4 25 6.551	+3.5032	+ 77	+19 2 56.36	+8.027	- 34
165	*[1 Camel. sq]	5.42	В I	4 27 16.037	+4.7505	o	+53 46 57.40	+7.887	- 1
167	[8 Caeli]	5.16	В 3	4 28 59.730	+1.8375	+ I	-45 4 53.83	+7.752	+ 2
168	α Tauri	1.06	К 5	4 32 28.475	+3.4425	- 47	+16 23 24.92	+7.280	-188
171	α Doradus	3.47	Аор	4 32 41.818	+1.2962	+ 57	-55 10 6.00	+7.456	+ 5
170	[υ <sup>2</sup> Eridani]	3.88	Ko	4 33 12.976	+2.3325	- 39	-30 4I 2.7I	+7.398	- 10
169	ν Eridani	4.12	B 2	4 33 19.124	+2.9979	+ 2	-3 28 25.38	+7.397	- 2
172	53 Eridani	3.98	Ko	4 35 25.859	+2.7479	- 48	-14 25 12.13	+7.067	-161
174	τ Tauri	4.33	B 5	4 38 38.392	+3.6008	- 1	+22 50 36.74	+6.950	- 15
173	Grb 848 Caml	6.04	F o	4 40 43.344	+8.0652	+104	+75 50 8.73	+6.656	-134
176	[ $\mu$ Eridani]	4.18	B 5	4 42 29.996	+2.9999	+ 9	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	+6.638	- 10
175	4 Camelop.	5.35	A 2	4 42 59.746	+4.9968	+ 65		+6.460	-145
177	[ $\mu$ Mensae]	5.69	B 9	4 43 39.251	-0.6006	+ 20		+6.588	+ 34
179	[ $\pi^4$ Orionis]	3.78	B 3	4 48 0.468	+3.1954	- 2		+6.193	+ 3
178	$\alpha$ Camelop.	4.38	B 0	4 48 4.164	+5.9612	+ 3		+6.193	+ 9
180	π <sup>5</sup> Orionis ι Aurigae *ε Aurigae β Camelop. ι Tauri	3.87	B 3	4 51 7.406	+3.1251	- 3	+ 2 20 38.22	+5.934	+ 3
181		2.90	K 2	4 53 4.912	+3.9068	+ 3	+33 4 22.70	+5.749	- 18
183		var.	F 5 p	4 57 39.483	+4.3051	+ 4	+43 44 II.80	+5.376	- 6
182		4.22	G o p	4 58 4.235	+5.3355	- 6	+60 2I 25.65	+5.332	- 14
184		4.70	A 5	4 59 30.358	+3.5861	+ 47	+2I 30 2I.65	+5.187	- 40
185	η Aurigae	3.28	B 3	5 2 18.135	+4.2070	+ 27	+4I 9 19.48	+4.924	- 66
186	ε Leporis	3.29	K 5	5 2 55.179	+2.5398	+ 18	-22 27 I.29	+4.870	- 69
187	[η² Pictoris]	4.92	K 5	5 3 24.574	+1.5530	+ 55	-49 39 30.23	+4.898	0
189	[ζ Doradus]	4.76	F 8	5 4 28.719	+1.0275	- 52	-57 33 I4.79	+4.926	+118
188	β Eridani	2.92	A 3	5 4 53.879	+2.9495	- 64	- 5 9 45.II	+4.693	- 77
190	[λ Eridani]	4·34	B 2	5 6 16.390	+2.8713	+ I	- 8 49 46.61	+4.651	- 3
192	μ Aurigae	4·78	A 3	5 9 19.091	+4.1053	- 17	+38 24 55.29	+4.315	- 78
194	β Orionis	0·34	B 8 p	5 11 39.167	+2.8834	+ 2	- 8 16 10.37	+4.194	- 1
193	α Aurigae	0·21	G o	5 12 15.148	+4.4322	+ 8I	+45 56 21.17	+3.720	-422
191	19 H. Camelop.	5·16	F 8	5 12 37.732	-+9.8785	-293	+79 10 1.31	+4.265	+158
196 195 197 198 199	<ul><li>Doradus</li><li>[τ Orionis]</li><li>[ο Columbae]</li><li>[12 G. Columb.]</li><li>[ζ Pictoris]</li></ul>	4.78 3.68 4.91 5.75 5.52	K o B 5 K o A o F 8	5 13 47.809 5 14 41.473 5 15 19.147 5 17 0.131 5 17 53.643	-0.0483 +2.9132 +2.1637 +2.3923 +1.4707	+ 10 - 11 + 69 + 5 + 10	-67 15 10.39 - 6 54 28.14 -34 57 10.26 -27 25 45.47 -50 40 10.89	+4.049 +3.927 +3.544 +3.733 +3.894	+ 35 - 8 -338 - 4 +234

Nr. 165. Doppelstern, Größe der Komponenten: 5.86 und 6.61. Nr. 183. Größe: Max. 3.4, Min. 4.1.

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o <sup>s</sup> ooor	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o!'001
200 201 202 203	†[η Orion. m] γ Orionis β Tauri 17 Camelop.	m 3.44 1.70 1.78	B 1 B 2 B 8 K 5	5 21 27.511 5 21 54.657 5 22 29.787 5 24 29.738	+3.0167 +3.2179 +3.7927 +5.6658	0 - 6 + 20 - 7	- 2°27 2.87 + 6 17 48.81 +28 33 31.08 +63 1 11.69	+3.355 +3.299 +3.087 +3.087	+ 2 - 15 - 175 - 2
204 206 207	[β Leporis] δ Orionis α Leporis	5.75 2.96 2.48 6.87 2.69	G o B o F o	5 25 40.398 5 28 56.369 5 30 4.945	+2.5711 +3.0652 +2.6463	+ I 0 + 2	-20 48 21.78 - 0 20 31.15 -17 51 50.00	+2.898 +2.707 2.611	- 91 + 1 + 4
208 205 209 212	[φ¹ Orionis] Grb 966 Caml ι Orionis β Doradus	4.53 6.36 2.87 3.81	B o K 5 O e 5 F 5 p	5 31 31.477 5 31 41.273 5 32 29.787 5 33 6.072	+3.2937 +8.0228 +2.9350 +0.5197	- I - 20 + I - II	+ 9 27 2.09 +75 0 29.19 - 5 56 51.90 -62 31 43.63	+2.479 +2.489 +2.402 +2.355	$ \begin{array}{rrr}  - 2 \\  + 26 \\  + 4 \\  + 9 \end{array} $
210 211 214 213	ε Orionis ζ Tauri [γ Mensae] †[σ Orionis m]	1.75 3.00 5.06 3.78	Bo Bap Ko Bo	5 33 10.035 5 34 3.405 5 34 14.962 5 35 43.933	+3.0444 $+3.5857$ $-2.3782$ $+3.0119$	+ 1 +306 - 1	- 1 14 19.32 +21 6 27.75 -76 23 5.43 - 2 37 59.42	+2.340 +2.239 +2.543 +2.118	+ I - 22 +295 + 2
215 216 217 218 219	α Columbae ο Aurigae [γ Leporis] [130 Tauri] ζ Leporis	2.75 5.52 3.80 5.51 3.67	B 5 p A o F 8 F o A 2	5 37 28.483 5 41 14.948 5 41 57.656 5 43 56.169 5 44 14.119	+2.1728 +4.6482 +2.5017 +3.4983 +2.7186	+ 2 - 10 -205 - 4 - 12	-34 6 17.86 +49 48 8.40 -22 28 0.09 +17 42 29.96 -14 50 34.87	+1.939 +1.632 +1.203 +1.393 +1.370	$ \begin{array}{c c} -26 \\ -3 \\ -371 \\ -8 \\ -5 \end{array} $
220 221 222 223 224	x Orionis [ν Aurigae] [δ Leporis] [β Columbae] α Orionis	2.20 4.18 3.90 3.22 0.92	Bo Ko Ko Ko Mo	5 44 54.570 5 47 19.756 5 48 44.406 5 48 50.570 5 51 55.337	+2.8456 +4.1581 +2.5806 +2.1148 +3.2483	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 9 41 22.38 +39 7 58.65 -20 52 58.38 -35 47 23.20 + 7 23 51.06	+1.313 +1.111 +0.334 +1.378 +0.715	- 4 + 7 -649 +404 + 11
226 225 227 228 229	[η Leporis] δ Aurigae β Aurigae †9 Aurigae η Columbae	3.77 3.88 2.07 2.71 4.03	Fo Ko Aop Aop Ko	5 53 40.242 5 54 35.116 5 55 7.573 5 55 37.708 5 57 18.510	+2.7328 +4.9406 +4.4014 +4.0915 +1.8363	- 29 + 97 - 50 + 40 + 13	-14 10 38.35 +54 16 57.03 +44 56 36.69 +37 12 37.30 -42 49 3.44	+0.689 +0.343 +0.420 +0.296 +0.217	+138 -127 - 3 - 83 - 17
230 231 232 233 235	[66 Orionis] [1 G. Puppis] v Orionis [36 Camelop.] [8 Pictoris]	5.7° 6.22 4.4° 5.39 4.84	Ko F 8 B 2 Ko B 1	6 1 48.052 6 2 44.705 6 4 8.695 6 6 48.921 6 9 7.687	+3.1699 +1.7265 +3.4258 +6.0369 +1.1676	- 4 - 88 + 3 + 12 - 19	+ 4 9 49.00 -45 2 7.50 +14 46 38.32 +65 44 0.14 -54 57 16.31	-0.166 +0.005 -0.388 -0.629 -0.786	- 7 +247 - 23 - 29 + 13
236 239 234 237 238	†*η Gemin. [α Mensae] 22 H. Camelop. [2 Lyncis] [κ Columbae]	var. 5.14 4.73 4.42 4.51	Mo Ko Ao Ao	6 11 15.291 6 12 1.827 6 12 14.245 6 14 19.783 6 14 24.925	+3.6218 -1.7853 +6.6132 +5.2944 +2.1338	48 +305 + 9 12 14	+22 31 33.55 -74 44 0.11 +69 20 39.42 +59 2 6.73 -35 7 10.05	-1.000 -1.266 -1.178 -1.236 -1.178	$ \begin{array}{c c} -13 \\ -215 \\ -103 \\ +20 \\ +84 \end{array} $

Nr. 236. Größe: Max. 3.3, Min. 4.2.

Nr.	N a m e	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o <sup>§</sup> ooo1	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oor
240 241 243 242 244 245 246	ζ Canis maj.  μ Geminor.  β Canis maj.  ψ¹ Aurigae 8 ε Monocer.  α Carinae 10 Monocer.	3.10 3.19 1.99 5.10 4.48 6.54 -0.86 4.98	B 3 Mo B 1 K 2 A 5 F 0 B 3	6 18 0.511 6 19 19.802 6 20 3.378 6 20 16.670 6 20 35.264 6 22 37.145 6 24 59.721	+ 2.3033 + 3.6299 + 2.6422 + 4.6217 + 3.1795 + 1.3324 + 2.9627	+ 5 + 40 - 4 + 1 - 12 + 24 - 6	-30 2 7.90 +22 32 46.20 -17 55 29.54 +49 19 14.80 + 4 37 29.77 -52 39 43.66 - 4 43 24.82	-1.570 -1.804 -1.757 -1.779 -1.790 -1.951 -2.179	+ 5 - 112 - 4 - 4 + 11 + 25 + 4
247 249 251	8 Lyncis ξ² Canis maj. γ Geminor.	6.05 4.54 1.93	Go Ao Ao	6 32 12.641 6 32 32.420 6 34 14.740	+ 5.4845 + 2.5145 + 3.4663	-289 + 6 + 30	+61 32 11.59 -22 54 57.68 +16 27 7.84	$ \begin{array}{r} -3.090 \\ -2.824 \\ -3.031 \end{array} $	$ \begin{array}{c c} - 279 \\ + 14 \\ - 44 \end{array} $
250	51 Aurigae	5.71	Ko	6 34 30.110	+ 4.1578	- 22	+39 26 44.51	-3.124	- 115
252	ν Puppis	3.18	B 8	6 35 55.433	+ 1.8355	- 7	-43 8 32.36	-3.132	- 1
248	23 H. Camelop.	5.60	F 8	6 36 1.854	+10.2568	-302	+79 38 4.32	-3.753	- 608
253	†*S Monoc.	4.68	O e 5	6 37 40.385	+ 3.3043	- I	+ 9 57 10.13	-3.289	- 7
254	ε Geminor.	3.18	G 5	6 40 14.446	+ 3.6915	- 5	+25 11 32.31	-3.519	- 15
256	ξ Geminor. [ψ <sup>5</sup> Aurigae] *α Canis maj. 18 Monocer. [ζ Mensae]	3.40	F 5	6 41 55.292	+ 3.3675	- 80	+12 57 42.87	-3.843	- 195
255		5.34	G o	6 42 24.957	+ 4.3254	- 1	+43 38 21.28	-3.529	+ 162
257		-1.58	A o	6 42 30.294	+ 2.6435	-373	-16 37 57.14	-4.909	1211
258		4.70	K o	6 44 43.888	+ 3.1284	- 14	+ 2 28 45.65	-3.903	- 13
264		5.64	A 2	6 45 4.526	- 4.9788	- 24	-80 45 9.76	-3.854	+ 59
259	[43 Camelop.]  \[ \alpha \text{ Pictoris} \]  \[ \tau \text{ Puppis} \]  \[ \text{ Geminor.} \]  [24 H. Camel.]	5.13	B 5	6 47 14.698	+ 6.4734	+ 2	+68 57 40.10	-4.103	+ 4
262		3.30	A 5	6 47 34.544	+ 0.6158	-108	-61 52 35.48	-3.862	+ 269
263		2.83	K 0	6 48 26.758	+ 1.4884	+ 26	-50 32 32.47	-4.279	- 72
261		3.64	A 2	6 48 50.126	+ 3.9550	- 1	+34 2 7.73	-4.294	- 52
260		4.75	K 5	6 51 20.700	+ 8.7625	+210	+77 3 29.01	-4.470	- 12
266	<ul> <li>θ Canis maj.</li> <li>†15 Lyncis m</li> <li>[ι Volantis]</li> <li>ε Canis maj.</li> <li>[ο² Canis maj.]</li> </ul>	4.25	K 2	6 51 24.081	+ 2.7876	- 95	-11 57 43.66	-4.474	- 14
265		4.54	G o	6 52 5.165	+ 5.1970	- 7	+58 30 13.79	-4.657	- 137
267		5.52	B 8	6 52 8.504	- 0.6850	- 10	-70 53 20.37	-4.501	+ 20
268		1.63	B 1	6 56 16.013	+ 2.3583	+ 4	-28 53 21.37	-4.871	+ 2
270		3.12	B 5 p	7 0 31.094	+ 2.5055	- 1	-23 44 39.93	-5.232	+ 2
269	γ Geminor.	var.	Gop	7 0 33.041	+ 3.5587	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	+20 39 36.07	-5.240	- 3
271	γ Canis maj.	4.07	B 5	7 1 2.584	+ 2.7147		-15 32 35.84	-5.287	- 9
272	[27 G. Carinae]	5.30	A 0	7 3 11.174	+ 1.1176		-56 39 28.84	-5.455	+ 2
273	δ Canis maj.	1.98	F 8 p	7 5 57.045	+ 2.4396		-26 17 48.28	-5.685	+ 5
274	63 Aurigae	5.07	K 2	7 7 31.837	+ 4.1276		+39 25 13.17	-5.826	- 2
275 276 277 278 279	[J Puppis] [64 Aurigae] λ Geminor. π Puppis δ Geminor.	4.47 5.75 3.65 2.74 3.51	F o A 3 A 2 K 5 F o	7 10 50.907 7 13 52.045 7 14 38.716 7 15 1.366 7 16 32.434	+ 1.7101 + 4.1728 + 3.4481 + 2.1192 + 3.5836	-142 $-16$ $-35$ $-8$ $-19$	-46 39 29.91 +40 59 30.81 +16 39 0.90 -36 59 18.98 +22 5 40.17	-6.001 -6.340 -6.454 -6.437 -6.586	+ 98 + 11 - 39 + 9 - 41

Nr. 253. Doppelstern, Größe der Komponenten: 6.0 und 8.8. Nr. 257. Ort des Schwerpunktes. Die Reduktion auf den Hauptstern ist nach den Elementen von Volet, Bull. Astr. II, Bd. 7, 1931.

1940.0  $\Delta \alpha = -0.002$   $\Delta \delta = -1.21$ 1941.0 = +0.018 = -0.93

Nr. 269. Größe: Max. 3.7, Min. 4.3.

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o!ooor	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oo1
281 280 283	δ Volantis 19 Lyncis sq [η Can. maj.]	m 4.02 5.61 2.43	F 5 B 8 B 5 p	7 16 51.944 7 17 58.696 7 21 43.240	-0.0275 +4.8978 +2.3732	- 12 - 8 - 5	-67 50 50.62 +55 23 48.14 -29 11 5.81	- 6.599 - 6.727 - 6.993	- 2 - 35 - 6
282 285	Geminor. β Canis min.	3.89	Ko B8	7 22 0.109 7 23 53.819	+3.7270 $+3.2538$	-92 $-38$	+27 55 8.52 $+8 24 42.29$	- 7.111 - 7.217	— 89   — 40
284 286 287 288 289	Grb 1308 Caml ρ Geminor. *α Geminor. [108 G. Pupp.] 25 Monocer.	5.80 4.18 2.85 1.99 4.52 5.17	Ko Fo Ao F8 F5	7 24 39.224 7 25 15.251 7 30 46.370 7 31 28.970 7 34 17.659	+6.2487 +3.8596 +3.8302 +2.5677 +2.9829	- 22 +116 -138 - 38 - 51	+68 35 27.99 +31 54 19.85 +32 1 17.98 -22 9 55.48 - 3 58 32.44	- 7.280 - 7.116 - 7.839 - 7.757 - 8.002	- 40 + 172 - 103 + 35 + 16
290 291 292 293 294	[127 G. Puppis] *α Canis min. 24 Lyncis [26 α Monocer.] κ Geminor.	4.62 0.48 4.96 4.07 3.68	B 8 F 5 A 2 K 0 G 5	7 35 8.793 7 36 9.708 7 37 56.429 7 38 22.801 7 40 49.637	+2.2195 +3.1406 +5.0797 +2.8667 +3.6228	$ \begin{array}{r r} -27 \\ -473 \\ -53 \\ -51 \\ -23 \end{array} $	-34 49 56.76 + 5 22 48.75 +58 51 10.91 - 9 24 35.70 +24 32 36.73	- 8.068 - 9.197 - 8.364 - 8.368 - 8.592	+ 18 -1030 - 54 - 24 - 54
295 297 296 298 301	β Geminor. ζ Volantis π Geminor. †[9 Pupp. m] [213 G. Puppis]	1.21 3.89 5.29 5.34 3.76	Ko Ko K2 Go G5	7 41 38.802 7 42 34.314 7 43 38.443 7 48 59.546 7 50 9.168	+3.6720 $-0.7332$ $+3.8695$ $+2.7782$ $+2.0619$	-475 + 58 - 9 - 45 - 21	+28 10 21.84 -72 27 44.08 +33 33 52.79 -13 44 15.42 -40 25 12.37	- 8.656 - 8.656 - 8.792 - 9.522 - 9.268	- 53 - 18 - 31 - 344
299 300 303 302 304	[26 Lyncis] Grb 1374 Caml x Carinae [53 Camelop.] [27 Monocer.]	5.69 5.56 3.60 6.00 5.06	Ко Ко В 3 А 2 р Ко	7 50 20.943 7 53 3.190 7 55 15.148 7 56 35.647 7 56 44.262	+4.3704 +7.1957 +1.5253 +5.1272 +2.9971	- 50 - 29 - 41 - 74 - 43	+47 43 19.46 +74 4 52.87 -52 49 14.07 +60 29 26.36 - 3 30 52.91	- 9.287 - 9.530 - 9.632 - 9.788 - 9.777	- 2 - 35 + 29 - 22 - 1
305 306 307 308 309	χ Geminor. ζ Puppis 27 Lyncis ρ Puppis γ Velorum	5.04 2.27 4.87 2.88 2.22	Ko Od A2 F5 Oap	7 59 50.144 8 1 28.445 8 3 57.146 8 4 59.271 8 7 40.960	+3.6856 +2.1084 +4.5156 +2.5553 +1.8492	- 21 - 30 - 67 - 60 - 8	+27 57 50.79 -39 49 59.27 +51 40 53.41 -24 7 48.57 -47 9 32.15	-10.058 -10.121 -10.332 -10.348 -10.594	- 46 + 13 - 9 + 51 + 5
311 310 312 313 314	20 Puppis Br 1147 Caml β Cancri [289 G. Puppis] 31 Lyncis	5.05 5.73 3.76 4.43 4.43	G 5 G 5 K 2 A 5 K 5	8 10 34.441 8 12 3.409 8 13 15.735 8 16 18.475 8 18 44.071	+2.7576 +7.5533 +3.2540 +2.2455 +4.1098	12 65 34 94 16	-15 36 22.60 +75 56 35.50 + 9 22 18.56 -36 28 20.72 +43 22 56.03	-10.819 -10.910 -11.062 -11.141 -11.512	- 6 -+ 15 - 51 + 91 - 104
315 318 316 319 317	ε Carinae θ Chamael. Br 1197 Hydra [β Volantis] ο Ursae maj.	1.74 4.26 3.95 3.65 3.47	K o + B K o A o K o G o	8 21 17.042 8 22 28.794	+1.2320 -1.7830 +2.9981 +0.6562 +4.9901		-59 18 56.98 -77 17 29.66		+ 18 + 38 - 26 - 160 - 112
Nr.	287. Ort des Schwer Nachr. Bd. 216,	ounktes. 1922:	19.	duktion auf den Or $40.0  \Delta \alpha = +6$ 41.0  = +6	o.o28	Sterns beta $\Delta \delta = +$ $= +$		nten von Rab	e, Astron.

Nr. 291. Ort des Schwerpunktes. Die Reduktion auf den Ort des hellen Sterns beträgt nach den Elementen von Jones, Monthly Notices Bd. 88, 1928:

Notices Bd. 88, 1928:  $1940.0 \quad \Delta \alpha = +0.034 \qquad \Delta \delta = -1.08$   $1941.0 \quad = +0.028 \qquad = -1.13$ 

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o <sup>8</sup> 0001	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oor
320 321 322 323 324 325 327 326 330	Grb 1450 Lynx η Cancri [Grb 1446 Caml] [Grb 1460 UMaj] [48 G. Velorum] [6 Hydrae] α Pyxidis δ Cancri †δ Velorum m ι Cancri	6.05 5.52 6.29 6.03 4.13 5.15 3.70 4.17 2.01 6.61	Ko Ko Ko A 5 K2 B 2 Ko A 0	8 29 1.280 8 29 14.458 8 33 4.988 8 34 51.489 8 35 31.947 8 37 10.850 8 41 10.784 8 41 16.646 8 43 2.798	+3.9020 +3.4700 +6.6877 +4.4487 +2.1089 +2.8423 +2.4108 +3.4100 +1.6570	- 86 - 35 - 50 - 39 - 17 - 60 - 13 - 14 + 22	+38 13 25.31 +20 38 46.81 +73 50 31.12 +52 55 24.62 -42 46 41.82 -12 15 43.92 -32 58 8.85 +18 22 34.01 -54 29 16.33 +28 58 50.75	-12.308 -12.200 -12.522 -12.575 -12.576 -12.701 -12.954 -13.204 -13.164	-173 - 49 -104 - 37 + 7 - 6 + 9 -233 - 76
328 331 329 332 333 334	[ $\eta$ Chamael.] †[ $\varepsilon$ Hydrae $m$ ] [ $\gamma$ Pyxidis] †[ $\sigma^2$ Canc. $m$ ] $\zeta$ Hydrae	5.62 3.48 4.19 5.60 3.30	G 5 B 9 F 8 K 2 K 0	8 43 4.207 8 43 24.919 8 43 35.978 8 47 59.044 8 50 35.280 8 52 13.373	+3.6317 -2.0155 +3.1777 +2.5464 +3.6618 +3.1717	- 19 - 78 - 130 - 101 + 28 - 69	-78 44 46.94 + 6 38 24.37 -27 29 11.18 +30 48 28.55 + 6 10 30.11	-13.135 -13.089 -13.179 -13.331 -13.605 -13.676	- 45 + 20 - 55 + 81 - 24 + 10
336	108 G. Carinae	3.98	B 8	8 53 41·345	+1.3611	- 25	-60 24 53.33	-13.737	+ 4I
335	ι Ursae maj.	3.12	A 5	8 55 6·535	+4.1106	- 443	+48 16 43.08	-14.110	-24I
337	α Cancri	4.27	A 3	8 55 12·431	+3.2818	+ 22	+12 5 28.27	-13.909	- 34
339	Br 1268 Lynx	4.09	F 5	8 56 45·117	+3.8968	- 395	+42 1 18.04	-14.230	-258
338	[ρ Ursae maj.]	4.99	Mo	8 57 9·788	+5.4193	- 45	+67 51 55.25	-13.983	+ 16
341	x Ursae maj. [Grb 1501 UMaj] α Volantis [97 G. Velorum] †σ² Ursae maj.	3.68	A o	8 59 32.282	+4.0988	- 35	+47 23 43.01	-14.204	- 58
340		5.68	A 2	8 59 37.348	+4.3993	- 14	+54 31 18.73	-14.153	- 1
343		4.18	A 5	9 1 30.312	+0.9503	+ 11	-66 9 22.36	-14.367	-101
342		3.69	K o	9 2 4.974	+2.0684	- 57	-46 51 29.13	-14.317	- 15
344		4.87	F 8	9 5 8.293	+5.2843	- 44	+67 22 47.53	-14.567	- 78
345	λ Velorum	2.22	K 5	9 5 47.215	+2.2064	- 25	-43 II 22.I3	-14.512	+ 15
346	[36 Lyncis]	5.30	B 8	9 9 53.214	+3.9263	- 27	+43 27 59.I0	-14.811	- 39
347	& Hydrae	3.84	A 0	9 11 14.603	+3.1219	+ 86	+ 2 34 6.34	-15.166	-314
348	β Carinae	1.80	A 0	9 12 33.074	+0.6637	- 280	-69 28 II.27	-14.825	+103
349	†[38 Lyncis]	3.82	A 2	9 15 6.996	+3.7352	- 26	+37 3 27.7I	-15.207	-130
35 <sup>1</sup>	t Carinae] *83 Cancri α Lyncis × Velorum α Hydrae	2.25	F o	9 15 29.049	+1.6067	- 23	-59 I 22.63	-15.093	+ 5
35 <sup>0</sup>		6.60	F 5	9 15 38.070	+3.3490	- 87	+17 57 38.76	-15.242	-135
35 <sup>2</sup>		3.30	K 5	9 17 24.314	+3.6564	- 181	+34 38 50.72	-15.196	+ 13
353		2.63	B 3	9 20 15.253	+1.8580	- 12	-54 45 I3.50	-15.360	+ 10
354		2.16	K 2	9 24 38.312	+2.9484	- 10	- 8 23 51.56	-15.586	+ 27
356	[ε Antliae] 23 Ursae maj. †ψ Velorum m 9 Ursae maj. 24 Ursae maj.	4.64	K <sub>2</sub>	9 26 45.987	+2.4760	- 22	-35 41 17.47	-15.739	- 10
355		3.75	F <sub>0</sub>	9 26 49.211	+4.7364	+ 156	+63 19 32.36	-15.707	+ 25
359		3.64	F <sub>5</sub>	9 28 20.053	+2.3625	- 167	-40 12 11.60	-15.743	+ 71
358		3.26	F <sub>8</sub> p	9 28 51.343	+4.0158	- 1031	+51 57 7.10	-16.385	-543
357		4.57	G <sub>0</sub>	9 29 12.698	+5.3154	- 135	+70 5 44.49	-15.786	+ 75

Nr. 350. Größe aus Harvard 54 entnommen.

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o!ooo1	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o!ooi
361	[N Velorum] 10 Leon. min. [HCarinae] [Grb 1564 UMaj] [Em Hydrae]	3.04	K 5	9 29 23.835	+1.8230	- 42	-56°46′ 8″.64	-15.868	+ 2
360		4.62	G 5	9 30 33.208	+3.6770	+ 4	+36°39°54.00	-15.962	- 29
362		5.52	K 2	9 31 10.181	+0.4569	- 32	-72°48°52.80	-15.972	- 8
363		5.74	K 0	9 37 8.646	+5.1458	-141	+69°30°43.39	-16.350	- 74
364		4.96	B 3	9 37 25.712	+2.8761	- 20	-14°3°33.36	-16.314	- 24
365 366 367 369 368	[o Leonis] 3 Antliae 2 Leonis 4 Carinae 3 Ursae maj.	3.76 4.98 3.12 3.15 6.03 3.89	F 5 P G 0 P F 0 F 0	9 37 56.986 9 41 31.493 9 42 26.935 9 45 36.174 9 46 44.400	+3.2025 +2.6743 +3.4064 +1.5012 +4.2712	<ul> <li>98</li> <li>38</li> <li>35</li> <li>10</li> <li>386</li> </ul>	+10 9 58.38 -27 29 38.52 +24 3 5.23 -64 47 35.16 +59 19 19.55	-16.355 -16.466 -16.558 -16.687 -16.908	- 39 - 30 - 17 + 9 - 157
37°	6 Sextantis [μ Leonis] [183 G. Hydrae] Grb 1586 UMaj [19 Leon. min.]	6.00	A 2	9 48 12.588	+3.0232	+ 5	- 3 57 40.89	-16.854	- 33
371		4.10	Ko	9 49 21.304	+3.4131	-162	+26 17 25.54	-16.936	- 60
373		5.16	Mo	9 52 2.314	+2.8301	- 31	-18 43 27.80	-17.048	- 47
372		5.96	Ko	9 53 3.799	+5.3767	-184	+73 9 58.12	-17.092	- 43
374		5.19	F 5	9 54 1.005	+3.6764	-107	+41 20 32.18	-17.122	- 30
375	$[φ \ Velorum]$ $[η \ Antliae]$ $[12 \ Sextantis]$ $π \ Leonis$ $η \ Leonis$	3.7°	B 5	9 54 45.166	+2.1058	- 16	-54 16 53.24	-17.114	+ II
377		5.25	F 0	9 56 17.603	+2.5733	- 81	-35 36 11.30	-17.219	- 25
376		6.63	A 5	9 56 36.347	+3.1121	- 49	+ 3 40 20.49	-17.191	+ I8
378		4.89	M 0	9 57 2.627	+3.1708	- 23	+ 8 19 58.37	-17.255	- 27
379		3.58	A 0 p	10 4 3.815	+3.2713	- 4	+17 3 21.63	-17.540	- 6
380 381 382 385 384	α Leonis λ Hydrae 191 G. Velorum [ω Carinae] ζ Leonis	3.83 4.09 3.56 3.65	B 8 K o A 2 B 8 F o	10 5 10.702 10 7 39.704 10 12 12.801 10 12 18.833 10 13 21.380	+3.1956 +2.9250 +2.5176 +1.4295 +3.3375	-169 -138 -136 - 45 + 11	+12 15 40.36 -12 3 24.60 -41 49 26.70 -69 44 22.63 +23 43 1.28	-17.579 -17.778 -17.828 -17.870 -17.926	+ 2 - 93 + 40 + 2 - 12
383	λ Ursae maj.	3.52	A 2	10 13 29.160	+3.6204	-152	+43 12 53.18	17.963	- 45
386	μ Ursae maj.	3.21	K 5	10 18 45.719	+3.5762	- 75	+41 48 7.24	18.092	+ 29
387	30 H. Urs. maj.	4.92	A 0	10 19 49.711	+4.3329	- 24	+65 52 14.44	18.185	- 25
388	[25 Sextantis]	6.10	B 9	10 20 24.470	+3.0323	- 37	- 3 46 12.59	18.181	o
389	μ Hydrae	4.06	K 5	10 23 11.199	+2.9016	- 89	-16 31 45.84	18.366	- 84
391	J Carinae	4.08	F 5	10 23 12.615	+1.1939	- 29	-73 43 33.47	-18.309	$ \begin{array}{r} -26 \\ +15 \\ -109 \\ -5 \\ -35 \end{array} $
392	α Antliae	4.42	K 5	10 24 24.192	+2.7452	- 57	-30 45 41.76	-18.311	
390	β Leon. min.	4.41	K 0	10 24 25.182	+3.4709	-102	+37 0 55.14	-18.435	
393	196 G. Carinae	4.08	F 0	10 25 40.285	+2.2011	- 20	-58 25 57.27	-18.375	
394	36 Ursae maj.	4.84	F 5	10 26 48.018	+3.8431	-218	+56 17 20.25	-18.445	
396 397 395 399 398	[\$\rho\$ Leonis] [203 G. Carinae] 9 H. Dracon. [44 Hydrae] [37 Ursae maj.]	3.85 3.58 5.04 5.32 5.16	B o p B 5 p G 5 K 2 F o	10 29 39.173 10 29 53.145 10 30 2.961 10 31 9.481 10 31 18.664	+3.1594 +2.1324 +5.1157 +2.8534 +3.8688	$ \begin{array}{rrr}  & - & 6 \\  & - & 27 \\  & - & 96 \\  & - & 7 \\  & + & 78 \end{array} $	$\begin{array}{c} + \ 9 \ 36 \ 57.40 \\ -61 \ 22 \ 34.36 \\ +76 \ 1 \ 22.60 \\ -23 \ 26 \ 7.50 \\ +57 \ 23 \ 32.50 \end{array}$	-18.513 -18.505 -18.530 -18.539 -18.528	- 6 + 9 - 9 + 18 + 34

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oor
400	†*[222 G. Velor.m] [γ Chamael.] [225 G. Velorum] 33 Sextantis [35 H. Urs. maj.]	4.06	F <sub>2</sub>	10 34 46.483	+2.5199	-157	-47 54 48.59	-18.693	- 19
401		4.10	+ A <sub>3</sub>	10 34 46.514	+0.7165	-125	-78 17 46.93	-18.654	+ 20
402		4.37	Mo	10 36 54.793	+2.3870	- 21	-55 17 25.23	-18.743	- 2
404		6.40	Go	10 38 21.007	+3.0521	- 94	- 1 25 32.32	-18.911	-125
403		5.23	Ko	10 38 48.021	+4.3044	- 8	+69 23 26.59	-18.817	- 17
405	[41 Leon, min.]  9 Carinae  42 Leon, min.  †μ Velorum  [8 <sup>2</sup> Chamael.]	5.05	A 2	10 40 9.395	+3.2629	- 85	+23 30 10.98	-18.835	+ 5
406		3.03	B 0	10 40 48.670	+2.1396	- 24	-64 4 46.58	-18.847	+ 12
407		5.37	B 9	10 42 31.970	+3.3371	- 21	+30 59 55.89	-18.951	- 41
408		2.84	G 5	10 44 11.009	+2.5794	+ 73	-49 6 9.44	-19.006	- 49
411		4.62	B 3	10 45 14.572	+0.5722	- 153	-80 13 25.14	-18.985	+ 2
409	53 Leonis	5.27	A o	10 46 6.259	+3.1539	- 4	+10 51 47.46	-19.039	-28 $+195$ $-285$ $-132$ $-31$
410	[ν Hydrae]	3.32	K o	10 46 39.740	+2.9602	+ 67	-15 52 45.17	-18.832	
412	[46 Leon. min.]	3.92	K o	10 49 57.678	+3.3566	+ 70	+34 32 19.61	-19.400	
414	[ι Antliae]	4.70	K o	10 53 55.020	+2.7954	+ 67	-36 48 53.26	-19.349	
413	[Br 1508 Drae]	6.26	G 5	10 55 12.746	+4.8148	-247	+78 5 31.72	-19.280	
415	239 G. Velorum $\beta$ Ursae maj. $\alpha$ Ursae maj. $\chi$ Leonis $[\chi^1$ Hydrae]	4.56	A 2	10 57 23.736	+2.7514	+ 17	-41 54 13.39	-19.305	- 4
416		2.44	A 0	10 58 14.023	+3.6242	+ 97	+56 42 16.04	-19.293	+ 27
417		1.95	K 0	11 0 2.493	+3.7074	-174	+62 4 31.19	-19.433	- 71
418		4.66	F 0	11 1 55.347	+3.0950	-231	+ 7 39 38.73	-19.453	- 49
419		5.06	F 5	11 2 26.239	+2.8899	-143	-26 58 9.57	-19.419	- 4
420 421 422 423 424	ψ Ursae maj. β Crateris δ Leonis θ Leonis [Grb 1757 UMaj]	3.15 4.52 2.58 3.41 5.97	K o A 2 A 3 A o K o	11 6 17.854 11 8 42.226 11 10 55.179 11 11 5.580 11 13 19.469	+3.3751 +2.9506 +3.1914 +3.1486 +3.3833	- 62 3 102 43 94	+44 49 28.00 -22 29 52.54 +20 51 9.88 +15 45 28.16 +49 48 14.51	-19.527 -19.647 -19.722 -19.671 -19.645	-31 $-103$ $-136$ $-82$ $-15$
425 426 427 428 429	v Ursae maj. δ Crateris σ Leonis π Centauri Grb 1771 UMaj	3.71 3.82 4.13 4.26 5.98	Ко Ко Ао В 5 Ао	II 15 14.534 II 16 20.301 II 18 2.551 II 18 15.794 II 19 18.404	+3.2418 $+2.9994$ $+3.0938$ $+2.7351$ $+3.5698$	- 23 - 85 - 64 - 31 - 13	+33 25 19.03 -14 27 12.92 + 6 21 30.42 -54 9 42.91 +64 39 32.73	-19.641 -19.482 -19.722 -19.716 -19.700	+ 22 +-200 - 13 - 4 +-29
43°	†[t Leonis] [γ Crateris] [58 Ursae maj.] λ Draconis ξ Hydrae	4.03	F 5	II 20 47.851	+3.1280	+113	+10 51 35.87	-19.830	- 79
431		4.14	A 5	II 21 52.880	+2.9971	- 69	-17 21 15.28	-19.769	- 2
432		5.88	F 8	II 27 16.672	+3.2481	- 53	+43 30 9.98	-19.764	+ 76
433		4.06	M o	II 27 51.887	+3.5686	- 78	+69 39 44.81	-19.867	- 20
434		3.72	G 5	II 30 2.757	+2.9503	-160	-31 31 31.25	-19.910	- 38
436 435 437 438 439	$\lambda$ Centauri $[C^2$ Centauri] $\upsilon$ Leonis $[\pi$ Chamael.] $[\upsilon$ Hydrae]	3·34 5·42 4·47 5·74 4.88	B 9 F 0 K 0 F 0 B 8	II 33 0.167 II 33 0.602 II 33 52.535 II 34 46.315 II 37 13.659	+2.7639 +2.9059 +3.0719 +2.4715 +2.9794	$ \begin{array}{r} -53 \\ +28 \\ +2 \\ -318 \\ -30 \end{array} $	-62 41 15.34 -47 18 31.47 - 0 29 32.37 -75 33 50.67 -34 24 42.81	-19.910 -19.956 -19.875 -19.915 -19.942	- 5 - 51 + 39 + 7 + 3

Nr. 400. Doppelstern, Größe der Komponenten: 4.5 und 5.0.

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o.ooo1	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oor
440 442 441 443 444 445 446 447 448	3 Draconis [λ Muscae] χ Ursae maj. [65 G. Centauri] β Leonis β Virginis [B Centauri] γ Ursae maj. †[ε Chamael. m]	5.48 3.80 3.85 4.22 2.23 3.80 4.71 2.54 5.05	K o A 5 K o G o A 2 F 8 K o A o B 9	11 39 8.578 11 42 45.752 11 42 53.340 11 43 35.923 11 46 0.006 11 47 34.134 11 48 8.176 11 50 40.993 11 56 37.042	+3.3515 +2.8288 +3.1702 +2.8979 +3.0605 +3.1251 +2.9957 +3.1582 +2.9681	- 83 -148 -139 - 42 -343 +494 - 88 +104 -139	+67 4 37.51 -66 23 45.62 +48 6 43.79 -60 50 40.79 +14 54 27.01 + 2 6 10.47 -44 50 22.94 +54 1 42.18 -77 53 15.43	-19.926 -19.957 -19.964 -20.011 -20.125 -20.289 -20.046 -20.021 -20.042	+ 34 + 30 + 23 - 19 - 119 - 275 - 29 + 6 - 1
449 450 451 452 453 454	[88 G. Centauri] o Virginis [Grb 1852 Caml] d Centauri c Corvi Br 1634 Caml	5.28 4.24 5.96 2.88 3.21 5.12	Fo G5 Ko B3p Ko A5	12 0 32.633 12 2 9.147 12 2 13.707 12 5 14.357 12 7 2.067 12 9 24.671	+3.1053 +3.0562 +3.0591 +3.1069 +3.0851 +2.8178	+292 +149 +439 - 33 - 49 + 22	+ 9 3 58.40 +77 14 28.09 -50 23 17.71 -22 17 9.95 +77 56 58.32	-20.163 -19.997 -20.142 -20.049 -20.024 -20.008	-120 + 45 -100 - 10 + 10 + 19
455 456 457 458 459	[δ Crucis] δ Ursae maj. [γ Corvi] [2 Can. ven.] β Chamael.	3.08 3.44 2.78 5.80 4.38	B 3 A 2 B 8 K 5 B 5	12 11 56.771 12 12 27.869 12 12 42.992 12 13 7.400 12 14 47.054	+3.1822 +2.9720 +3.0850 +3.0079 +3.5033	- 44 +125 -111 + 14 -133	-58 24 54.36 +57 21 57.01 -17 12 32.02 +40 59 38.48 -78 58 44.88	-20.022 -20.011 -19.996 -20.049 -19.986	$ \begin{array}{rrr}  - & 6 \\  + & 3 \\  + & 16 \\  - & 39 \\  + & 16 \end{array} $
460 461 462 463 464	η Virginis [6 Can. ven.] α Crucis m [323 G. Hydr.] [σ Centauri]	4.00 5.22 1.58 2.09 5.68 4.16	A o K o B I A o B 3	12 16 50.067 12 22 53.789 12 23 15.000 12 23 41.567 12 24 47.093	+3.0694 +2.9567 +3.3325 +3.1604 +3.2421	$ \begin{array}{rrr}  - 42 \\  - 70 \\  - 39 \\  - 6 \\  - 25 \end{array} $	- 0 20 0.57 +39 21 4.52 -62 46 0.94 -32 29 51.18 -49 53 54.62	-20.012 -19.983 -19.952 -19.966 -19.947	- 22 - 40 - 12 - 30 - 21
466 465 467 468 469	20 Comae δ Corvi [74 Ursae maj.] [γ Crucis] [γ Muscae]	5.72 3.11 5.44 1.61 4.04	A 2 A 0 A 5 M 3 B 5	12 26 42.433 12 26 45.342 12 27 9.607 12 27 49.467 12 28 51.424	+3.0144 +3.1037 +2.8040 +3.3243 +3.5750	+ 17 -146 - 87 + 38 - 92	+21 13 41.41 -16 10 53.70 +58 44 8.40 -56 46 38.53 -71 48 6.14	-19.942 -20.050 -19.814 -20.159 -19.890	$ \begin{array}{r} -34 \\ -143 \\ +88 \\ -264 \\ -6 \end{array} $
470 472 471 473 474	β Can. ven.  » Draconis  β Corvi  24 Comae sq  α Muscae	4·3 <sup>2</sup> 3.88 2.84 5.18 2.94	G o B 5 p G 5 K o B 3	12 30 53.800 12 30 55.924 12 31 13.833 12 32 7.218 12 33 34.976	+2.8500 +2.5639 +3.1509 +3.0095 +3.5704	-631 -118 + 4 - 4 - 64	+41 40 59.82 +70 7 7.46 -23 3 54.50 +18 42 25.66 -68 48 18.31	-19.574 -19.853 -19.915 -19.826 -19.841	+287 $+8$ $-57$ $+20$ $-13$
475 476 477 478 479	[χ Virginis] †γ Centauri m †[γ Virg. m] 76 Ursae maj. [330 G. Hydr.]	4.78 2.38 3.65 3.68 5.92 5.73	Ko Ao Fo Ao K2	12 36 8.784 12 38 11.812 12 38 37.056 12 38 57.023 12 40 48.246	+3.3059 +3.0397 +2.6230	$ \begin{array}{r rrr}  - 52 \\  -192 \\  -378 \\  - 56 \\  - 27 \end{array} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-19.827 -19.772 -19.751 -19.776 -19.765	$ \begin{array}{rrrr}  - 33 \\  - 6 \\  + 8 \\  - 22 \\  - 38 \end{array} $

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in ofocoi	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oor
480 481 482 483 484 486 485 487 488	†[β Muscae m] β Crucis 150 G. Centauri ε Ursae maj. δ Virginis 8 Draconis α Can. ven. sq [δ Muscae] ε Virginis	3.26 1.50 4.34 1.68 3.66 5.27 2.90 3.63 2.95	B 3 B 1 A 5 A 0 p M 0 F 0 A 0 p K 2	12 42 34.735 12 44 12.003 12 50 6.295 12 51 23.696 12 52 34.765 12 53 5.556 12 53 13.417 12 58 6.786 12 59 11.350	+3.6728 +3.5012 +3.3210 +2.6411 +3.0219 +2.3900 +2.8070 +4.1170 +2.9864	- 51 - 47 + 58 + 134 - 314 - 15 - 201 + 570 - 186	-67 46 47.89 -59 21 39.52 -39 51 10.31 +56 17 6.73 + 3 43 23.29 +65 45 48.95 +38 38 31.23 -71 13 32.85 +11 16 52.48	-19.720 -19.685 -19.591 -19.550 -19.575 -19.543 -19.454 -19.432 -19.359	- 22 - 14 - 25 - 9 - 57 - 36 + 50 - 31 + 19
489 490 491 492 493 494	[ξ² Centauri]  Delia Virginis [17 Can. ven.]  Generation Comae [η Muscae] [20 Can. ven.]	4.40 4.44 6.04 4.32 4.95 4.66	B3 Ao Fo Go B8 Fo	13 3 23.724 13 6 50.410 13 7 18.007 13 9 4.452 13 11 9.355 13 14 51.256	+3.4987 +3.1059 +2.7554 +2.8001 -4.0574 +2.6908	- 32 - 23 - 64 - 604 - 57 - 110	-49 35 6.94 - 5 13 8.79 +38 49 2.46 -+28 10 54.46 -67 34 37.84 +40 53 16.89	-19.292 -19.231 -19.147 -18.263 -19.100 -18.965	- 11 - 35 + 38 +877 - 16 + 18
495 496 497 498 499	γ Hydrae ι Centauri ζ Urs. maj. pr α Virginis Grb 2001 UMin	3·33 2.91 2.40 1.21 6.07	G 5 A 2 A 2 p B 2 K 5	13 15 39.271 13 17 12.956 13 21 30.758 13 22 1.703 13 24 36.067	+3.2611 +3.3708 +2.4166 +3.1602 +1.5288	+ 53 -281 +140 - 26 + 39	-22 51 19.91 -36 23 46.78 +55 14 17.60 -10 50 55.41 +72 42 9.77	-19.009 -19.003 -18.814 -18.806 -18.706	- 49 - 87 - 25 - 33 - 13
500 501 502 503 505	69 H. Urs. maj. ζ Virginis 17 H. Can. ven. [49 G. Chamael.] [Grb 2029 UMin]	5.41 3.44 4.96 6.44 5.67	A o A 2 F o A o K o	13 26 15.093 13 31 37.990 13 32 7.129 13 34 0.739 13 35 44.240	+2.2026 +3.0568 +2.6789 +5.1136 +1.4396	-110 -190 + 68 - 35 - 89	+60 15 18.76 - 0 17 23.38 +37 29 21.24 -75 22 43.50 +71 32 50.03	-18.607 -18.426 -18.457 -18.393 -18.325	+ 33 + 36 - 12 - 15 - 5
504 506 507 509 508	c Centauri [1 Centauri] τ Bootis η Ursae maj. [μ Centauri]	2.56 4.36 4.51 1.91 3.32	B 1 F 5 F 5 B 3 B 2 p	13 36 4.326 13 42 16.230 13 44 24.598 13 45 10.668 13 45 59.519	+3.7972 +3.4078 +2.8510 +2.3646 +3.6115	-22 $-363$ $-338$ $-126$ $-19$	-53 9 43.03 -32 44 27.63 +17 45 18.40 +49 36 43.89 -42 10 31.96	-18.321 -18.229 -17.964 -17.983 -17.961	- 14 -150 + 34 - 14 - 24
510 511 512 513 514	89 Virginis [10 Draconis] ζ Centauri η Bootis [294 G. Cent.]	5.11 4.77 3.06 2.80 4.68	Ko Mo B2p Go Ko	13 46 36.371 13 49 40.701 13 51 47.093 13 51 49.609 13 53 17.008	+3.2591 +1.7519 +3.7392 +2.8567 +4.3342	- 70 - 4 - 55 - 44 - 49	-17 50 9.81 +65 1 8.92 -46 59 37.37 +18 41 51.89 -63 23 36.49	-17.956 -17.800 -17.746 -18.066 -17.674	-43 $-9$ $-42$ $-362$ $-31$
515 517 516 518 521	[47 Hydrae] 11 Bootis τ Virginis β Centauri α Draconis	5.17 6.12 4.34 0.86 3.64	B 8 A 3 A 2 B 1 A o p	13 55 8.779 13 58 27.204 13 58 35.410 13 59 34.197 14 2 45.720	+3.3657 +2.7205 +3.0531 +4.2284 +1.6239	- 32 - 63 + 11 - 25 - 89	-24 40 48.27 +27 40 32.37 + 1 50 2.81 -60 5 4.08 +64 39 43.65	-17.593 -17.412 -17.442 -17.395 -17.222	- 28 + 12 - 24 - 20 + 13

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in 0.0001	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oor
519 520 522 524 523 525 526 528 527 529	[π Hydrae] θ Centauri 12 d Bootis 4 Ursae min. κ Virginis ι Virginis α Bootis [ι Bootis] λ Bootis [υ Centauri]	4.82 F 5.00 K 4.31 K 4.16 F 0.24 K 4.78 A 4.26 A	5	14 2 56.881 14 3 8.573 14 7 39.704 14 9 2.928 14 9 41.448 14 12 51.877 14 12 55.397 14 14 2.435 14 14 6.172 14 16 7.018	+3.4155 +3.5288 +2.7362 -0.2444 +3.1999 +3.1457 +2.7363 +2.1245 +2.2809 +4.1845	+ 34 - 427 - 18 - 108 + 5 - 7 - 776 - 163 - 182 - 22	-26 23 38.94 -36 4 32.30 +25 22 30.50 +77 49 45.88 - 9 59 43.19 - 5 42 54.13 +19 29 38.52 +51 38 36.18 +46 21 47.36 -56 6 40.19	-17.370 -17.740 -17.077 -16.921 -16.782 -17.195 -18.762 -16.622 -16.550 -16.623	- 144 - 522 - 64 + 28 + 135 - 428 - 1997 + 89 + 158 - 14
53° 531 532 533 534	[10 G. Circini]  θ Bootis  [52 Hydrae]  [φ Virginis]  ρ Bootis	5.71 A 4.06 F 5.00 B 4.97 K	2 p 8 8	14 20 5.865 14 23 9.195 14 24 39.133 14 25 6.455 14 29 14.593	+4.9624 +2.0422 +3.5124 +3.0910 +2.5855	- 23 - 261 - 18 - 92 - 79	-67 55 25.68 +52 7 38.78 -29 13 22.84 - 1 57 35.74 +30 38 2.30	-16.426 -16.659 -16.206 -16.161 -15.824	- 14 - 401 - 26 - 4 + 117
535 536 537 538 540	γ Bootis [Grb 2125 Drac] η Centauri *α Centauri [33 Bootis]	6.18 F 2.65 + 1.70 K 0.33 G	O 3 p A 2 p 5 O	14 29 39.685 14 30 4.896 14 31 41.220 14 35 30.545 14 36 36.197	+2.4158 +1.6281 +3.8070 +4.0731 +2.2325	- 98 - 72 - 30 -4882 - 68	+38 34 11.72 +60 29 21.91 -41 53 43.40 -60 35 20.51 +44 39 46.02	-15.769 -15.882 -15.844 -14.891 -15.562	+ 149 + 14 - 35 + 711 - 19
539 541 543 545 544	[α Circini] [α Lupi] †ζ Bootis m μ Virginis [371 G. Centauri]	2.89 B 4.83 A 4.43 S 3.95 F	5	14 37 37.909 14 37 55.642 14 38 16.893 14 39 53.666 14 39 58.752	+4.8400 +3.9871 +2.8647 +3.1614 +3.6675	$ \begin{array}{rrr}  - 295 \\  - 16 \\  + 36 \\  + 71 \\  - 52 \end{array} $	-64 42 55·32 -47 7 54·53 +13 59 5·02 - 5 23 54·30 -34 54 59·25	-15.721 -15.487 -15.469 -15.680 -15.539	- 237 - 19 - 20 - 322 - 186
542 546 547 548 549	α Apodis [30 G. Lupi] 109 Virginis α² Librae Grb 2164 Drac	5.20 K 3.76 A 2.90 A	5 5 0 10 13	14 40 18.603 14 42 48.603 14 43 12.759 14 47 33.259 14 49 54.800	+7.4165 +4.1915 +3.0330 +3.3182 +1.5222	- 9 - 24 - 74 - 73 - 167	-78 47 32·52 -52 7 51·04 + 2 8 40·78 -15 47 36.88 +59 32 14·01	-15.353 -15.275 -15.202 -14.991 -14.648	- 21 - 83 - 31 - 71 + 134
550 551 552 553 554	β Ursae min. Pi XIV 221 Boot β Lupi [ centauri] [ 2 H. Urs. min.]	5.77 A 2.81 B 3.35 B	3 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 50 51.420 14 53 23.179 14 54 35.480 14 55 14.888 14 56 37.268	-0.1815 +2.8316 +3.9264 +3.9008 +0.9518	- 84 - 10 - 37 - 15 - 138	+74 24 2.71 +14 41 15.92 -42 53 36.65 -41 51 52.98 +66 10 15.62	-14.718 -14.578 -14.542 -14.490 -14.354	+ 9 - 4 - 41 - 28 + 26
555 556 557 558 559	β Bootis σ Librae ψ Bootis ζ Lupi [ι Librae]	3.41 M 4.67 K 3.50 K	3 5 1 3 3 0 4 0 p	14 59 41.074 15 0 33.130 15 1 52.387 15 7 57.647 15 8 47.744	+2.2596 +3.5105 +2.5707 +4.3062 +3.4190	- 40 - 53 - 133 - 121 - 27	+40 37 34.88 -25 2 50.71 +27 10 50.23 -51 52 20.47 -19 33 57.27	-14.224 -14.185 -14.064 -13.737 -13.659	- 33 - 48 - 9 - 67 - 42

Nr. 538. Ort des Schwerpunktes. Die Reduktion auf den Ort des belleren Sternes beträgt nach den Elementen von Finsen, Union Observ. Circular 68, 1926:

1940.0  $\Delta \alpha = +0.091$   $\Delta \delta = -2.38$ 1941.0 = +0.057 = -2.73

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in	Dekl. 1940.0	J <b>ä</b> hrl. Verände- rung	Jährl. Eigen- bew. in o"oor
562 561 563 560 564 565 566	[3 Serpentis] [β Circini] δ Bootis γ Triang. austr. β Librae 1 H. Urs. min. φ¹ Lupi	5.44 4.16 3.54 3.06 2.74 5.23 3.59	K o A 3 Ko A o B 8 Go K 5	15 12 12.224 15 12 47.918 15 13 4.932 15 13 16.641 15 13 46.447 15 13 56.359 15 17 59.422	+2.9819 +4.6914 +2.4187 +5.5916 +3.2279 +0.6859 +3.8048	- 14 126 + 66 105 66 +-371 79	+ 5 9 39.45 -58 34 43.64 +33 32 15.56 -68 27 35.34 - 9 9 45.92 +67 34 27.53 -36 2 42.30	-13.395 -13.495 -13.458 -13.352 -13.317 -13.676 -13.103	+ I - 138 - 118 - 27 - 23 - 391 - 87
569 568 570	$\gamma$ Ursae min. $\mu$ Bootis $pr$ [ $\tau^1$ Serpentis]	3.14 4.47 6.66 5.46	A 2 F o K o M O	15 20 48.321 15 22 13.336 15 23 0.287	-0.0999 +2.2664 +2.7823	- 48 124 12	+72 2 51.12 +37 35 11.86 +15 38 16.25	-12.811 -12.650 -12.693	+ 19 + 83 - 14
571 567 572 573 576	t Draconis [κ¹ Apodis] β Coron. bor. ν¹ Bootis [ϑ Coron. bor.]	3.47 5.65 3.72 5.15 4.17	Ko B 5 p F o p K 5 B 5	15 23 35.408 15 24 55.783 15 25 21.212 15 28 46.337 15 30 30.504	+1.3338 +6.5229 +2.4735 +2.1548 +2.4189	- 16 + 15 -138 + 7 - 19	+59 10 32.35 -73 11 2.54 +29 18 41.45 +41 2 12.23 +31 33 37.99	-12.628 -12.581 -12.438 -12.293 -12.183	+ 13 - 34 + 82 - 7 - 18
575 574 578 577 579	†γ Lupi m [ε Triang. austr.] α Coron. bor. γ Librae [υ Librae]	2.95 4.11 2.31 4.02 3.78	B 3 K o A o K o K 2	15 31 8.006 15 31 12.218 15 32 8.751 15 32 9.912 15 33 22.545	+3.9959 +5.4819 +2.5401 +3.3554 +3.6413	- 13 + 44 + 90 + 43 - 4	-40 57 59.58 -66 7 2.76 +26 54 56.03 -14 35 26.97 -27 56 15.96	-12.151 -12.184 -12.142 -12.047 -11.966	- 30 - 69 - 91 + 1
580 581 582 583 587	[φ Bootis] †[γ Coron. bor.] α Serpentis β Serpentis [12 H. Dracon.]	5.41 3.93 2.75 3.74 5.13	G 5 A 0 K 0 A 2 A 2	15 35 40.200 15 40 13.269 15 41 18.606 15 43 24.986 15 45 44.684	+2.1545 +2.5193 +2.9549 +2.7689 +0.9129	+ 52 - 80 + 92 + 48 + 48	+40 32 52.17 +26 29 4.55 + 6 36 47.33 +15 36 30.20 +62 47 4.33	-11.747 -11.437 -11.355 -11.297 -11.142	+ 56 + 43 + 45 - 48 - 61
584 590 585 586 588	× Serpentis ζ Ursae min. μ Serpentis [χ Lupi] ε Serpentis	4.28 4.34 3.63 4.11 3.75	K 5 A 2 A 0 B 9 A 2	15 46 2.219 15 46 9.314 15 46 29.145 15 47 8.332 15 47 49.343	+2.7006 -2.1564 +3.1307 +3.8108 +2.9904	$ \begin{array}{r}  - 34 \\  + 52 \\  - 58 \\  - 8 \\  + 85 \end{array} $	+18 19 32.57 +77 58 47.76 - 3 14 52.66 -33 26 45.46 + 4 39 25.39	-11.147 -11.057 -11.054 -11.010 -10.865	- 89 - 4 - 28 - 32 + 63
589 591 593 592 595	β Triang. austr. [γ Serpentis] ε Coron. bor. [π Scorpii] [Grb 2296 Drac]	3.04 3.86 4.22 3.00 4.96	F o F 5 K o B 2 A 5	15 49 50.123 15 53 40.755 15 55 6.084 15 55 13.006 15 56 21.751	+5.2798 +2.7710 +2.4835 +3.6286 +1.4222	$ \begin{array}{r} -282 \\ +212 \\ -61 \\ -6 \\ -185 \end{array} $	-63 14 51.05 +15 51 22.27 +27 3 1.74 -25 56 34.24 +54 55 6.95	-11.171 -11.781 -10.453 -10.404 -10.189	- 393 -1287 - 64 - 25 + 106
594 598 597 596 599	δ Scorpii  Draconis  Scorpii pr  Scorpii pr  Scorpii pr  Scorpii pr	2.54 4.II 2.90 5.06 4.84 4.33	B o F 8 B I A 3 P B 3	15 56 46.849 16 0 45.599 16 1 56.626 16 2 14.495 16 2 38.702	+4.2378	$ \begin{array}{c c} - & 5 \\ -413 \\ - & 2 \\ + & 4 \\ - & 17 \end{array} $	-22 27 8.86 +58 43 29.85 -19 38 33.83 -45 0 43.62 -36 38 26.29		$ \begin{array}{r rrrr}  & - & 27 \\  & + & 336 \\  & - & 22 \\  & + & 31 \\  & - & 36 \\ \end{array} $

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o:ooo1	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oor
601 600 602 603 606	[φ Herculis] [κ Normae] [δ Triang. austr.] δ Ophiuchi 19 Ursae min.	4.26 5.09 4.03 3.03 5.51	B 9 p K o G o M o B 8	16 6 52.606 16 8 44.038 16 9 57.513 16 11 11.889 16 12 30.316	+1.8898 +4.7277 +5.4551 +3.1436 -1.7188	- 28 - 11 + 10 - 31 - 15	+45 5 28.72 -54 28 38.03 -63 32 4.78 - 3 32 28.61 +76 1 45.92	-9.461 -9.376 -9.269 -9.305 -9.048	+ 35 - 26 - 15 - 146 + 13
605 604 607 608 612	ε Ophiuchi γ² Normae [σ Scorpii] τ Herculis [η Ursae min.]	3.34 4.14 3.08 3.91 5.04	Ko Ko Bı B5 Fo	16 15 8.606 16 15 20.429 16 17 32.195 16 17 56.092 16 19 13.842	+3.1739 +4.4860 +3.6459 +1.8031 -1.7610	+ 55 -170 - 7 - 12 -229	- 4 32 51.61 -50 0 36.99 -25 27 1.63 +46 27 19.43 +75 53 39.56	-8.812 -8.889 -8.687 -8.596 -8.282	+ 39 - 54 - 24 + 37 +250
609 610 613 614 615	γ Herculis [ζ Triang. austr.] [ω Herculis] [Grb 2343 Drac] †η Draconis	3·79 4·93 4·53 5.66 2.89	F o G o A o p A 2 G 5	16 19 16.269 16 21 59.383 16 22 38.668 16 23 6.379 16 23 10.358	+2.6463 +6.4459 +2.7684 +1.3119 +0.8115	- 35 +403 + 27 + 13 - 30	+19 17 34.07 -69 57 6.88 +14 10 12.38 +55 20 27.14 +61 38 58.63	-8.483 -8.204 -8.318 -8.206 -8.159	+ 44 +104 - 59 + 17 + 58
611 616 618 617 619	γ Apodis α Scorpii β Herculis †[λ Ophiuchi m] Δ Draconis	3.90 1.22 2.81 3.85 4.98	Ко мо + Аз Ко Ао В 8 р	16 24 10.815 16 25 43.457 16 27 38.315 16 27 53.081 16 28 5.360	+9.1819 +3.6782 +2.5787 +3.0257 -0.1198	-408 - 2 - 72 - 21 - 53	-78 45 58.83 -26 18 1.84 +21 37 8.78 + 2 6 50.02 +68 53 52.78	-8.199 -8.034 -7.875 -7.913 -7.790	$ \begin{array}{r} -67 \\ -23 \\ -16 \\ -74 \\ +34 \end{array} $
620 621 623 622 624	[τ Scorpii] σ Herculis [Grb 2373 UMin] ζ Ophiuchi [Br 2114 Ophi]	2.91 4.25 6.39 2.70 5.04	Bo Ao G5 Bo Ko	16 32 8.556 16 32 9.989 16 33 11.508 16 33 51.103 16 38 5.936	+3.7341 +1.9339 -2.5901 +3.3031 +3.4693	$ \begin{array}{rrr}  - & 5 \\  - & 12 \\  -325 \\  + & 8 \\  - & 16 \end{array} $	-28 5 35.63 +42 33 35.44 +77 34 1.58 -10 26 49.66 -17 37 39.62	-7.519 -7.450 -7.139 -7.332 -7.012	$ \begin{array}{r} -25 \\ +43 \\ +274 \\ +24 \\ -3 \end{array} $
626 625 627 628 629	η Herculis α Triang. austr. Grb 2377 Drac ε Scorpii 49 Herculis	3.61 1.88 4.88 2.36 6.41	Ко К2 Fо Ко Аор	16 40 50.218 16 42 17.552 16 44 9.275 16 46 16.350 16 49 20.814	+2.0565 +6.3478 +1.1372 +3.8852 +2.7311	+ 29 + 51 + 17 -490 + 10	+39 2 7.36 -68 55 13.34 +56 53 18.77 -34 11 9.80 +15 4 24.79	-6.868 -6.695 -6.447 -6.587 -6.077	$     \begin{array}{r}       -83 \\       -33 \\       +65 \\       -252 \\       +3     \end{array} $
630 631 632 633 634	†ζ² Scorpii ζ Arae [ε¹ Arae] × Ophiuchi ε Herculis	3.75 3.06 4.15 3.42 3.92	K 5 K 5 K 2 K 0 A 0	16 50 21.321 16 53 38.769 16 54 47.620 16 54 49.566 16 57 59.513	+4.2204 +4.9625 +4.7796 +2.8394 +2.2950	-113 - 20 0 -199 - 40	-42 15 37.73 -55 53 51.30 -53 4 13.21 + 9 28 0.93 +31 0 49.11	-6.229 $-5.751$ $-5.605$ $-5.630$ $-5.327$	$     \begin{array}{r}       -235 \\       -33 \\       +17 \\       -8 \\       +29     \end{array} $
635 636 637 638 639	[60 Herculis] [Grb 2415 Herc] †η Ophiuchi m [η Scorpii] ζ Draconis	4.91 6.27 2.63 3.44 3.22	A 3 A 2 A 2 F 2 B 5	17 2 35.623 17 5 49.156 17 6 56.053 17 7 51.039 17 8 36.443	+2.7818 +1.9565 +3.4401 +4.2962 +0.1727	+ 33 - 34 + 26 + 22 - 32	+12 49 18.70 +40 35 36.52 -15 39 8.19 -43 9 43.25 +65 47 18.36	-4.975 -4.726 -4.503 -4.801 -4.436 B 40	$ \begin{array}{r} -9 \\ -33 \\ +94 \\ -283 \\ +21 \end{array} $

Nr.	N a m e	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o‱	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o".oo1
640 641 643 642 644	†α Herculis pr δ Herculis π Herculis [ι Apodis] ϑ Ophiuchi	3.48 5.39 3.16 3.36 5.60 3.37	M 3 A 2 K 5 B 8 B 3	17 11 54.587 17 12 33.912 17 12 57.322 17 15 23.602 17 18 19.309	+2.7354 +2.4640 +2.0892 +6.6888 +3.6841	- 8 - 18 - 25 + 12 - 2	+14 27 26.58 +24 54 31.28 +36 52 32.60 -70 3 47.58 -24 56 29.03	-4.136 -4.275 -4.080 -3.886 -3.643	+ 37 -158 + 4 - 14 - 21
645 647 646 650 648	β Arae [27 H. Ophiuchi] [45 Ophiuchi] [77 Herculis] δ Arae	2.80 4.61 4.37 5.81 3.79	K 2 F 0 F 5 A 2 B 8	17 20 18.375 17 23 26.719 17 23 31.197 17 25 8.667 17 25 40.581	+4.9859 +3.1829 +3.8306 +1.5897 +5.4149	- 7 - 64 + 15 - 4 - 66	-55 28 31.70 - 5 2 6.44 -29 48 52.43 +48 18 34.45 -60 38 10.22	-3.475 -3.225 -3.315 -3.042 -3.075	- 25 - 44 - 141 - 7 - 88
649 651 653 652 655	[υ Scorpii] α Arae β Draconis λ Scorpii [ν¹ Draconis]	2.80 2.97 2.99 1.71 4.98	B 3 B 3 p G o B 2 A 5	17 26 40.866 17 27 11.961 17 29 4.473 17 29 31.869 17 30 59.491	+4.0785 +4.6371 +1.3551 +4.0734 +1.1806	o - 28 - 21 o +165	-37 14 59.44 -49 49 50.72 +52 20 42.40 -37 3 42.97 +55 13 28.70	-2.932 2.928 -2.683 -2.682 -2.476	- 31 - 72 + 13 - 28 + 54
657 656 659 654 658	[ν² Draconis] α Ophiuchi [27 Draconis] ϑ Scorpii ξ Serpentis	4.95 2.14 5.21 2.04 3.64	A 5 A 5 K 0 F 0 A 5	17 31 4.914 17 32 8.853 17 32 11.956 17 33 0.251 17 34 8.920	+1.1817 +2.7845 -0.2416 +4.3103 +3.4347	+168 + 80 - 29 + 15 - 32	+55 12 47.42 +12 36 8.27 +68 10 24.13 -42 57 41.80 -15 21 44.97	$ \begin{array}{r} -2.469 \\ -2.654 \\ -2.291 \\ -2.350 \\ -2.315 \end{array} $	+ 52 -226 +134 + 3 - 61
664 663 660 662 661	ω Draconis ι Herculis [κ Scorpii] [μ Arae] η Pavonis	4.87 3.79 2.51 5.26 3.58	F 5 B 3 B 2 G 5 K o	17 37 17.875 17 37 46.137 17 38 20.039 17 39 22.607 17 39 50.380	-0.3522 +1.6932 +4.1499 +4.7624 +5.8883	+ 3 - 9 - 5 - 21 - 5	+68 47 9.16 +46 2 14.55 -39 0 3.80 -51 48 15.27 -64 41 52.12	-1.659 -1.936 -1.917 -1.985 -1.807	+323 + 4 - 28 - 188 - 50
665 670 666 667 668	β Ophiuchi ψ Draconis pr [ι¹ Scorpii] μ Herculis [γ Ophiuchi]	2.94 4.90 6.07 3.14 3.48 3.74	Ko F 5 F 5 P G 5 A 0	17 40 30.407 17 42 59.984 17 43 23.135 17 44 6.498 17 44 52.945	+2.9634 -1.0682 +4.1958 +2.3478 +3.0079	$ \begin{array}{rrr}  & -28 \\  & +37 \\  & +2 \\  & -239 \\  & -16 \end{array} $	+ 4 35 27.04 +72 10 43.81 -40 6 20.55 +27 45 16.76 + 2 43 42.12	-1.542 -1.753 -1.453 -2.131 -1.390	+159 -267 - 4 -744 - 71
669 675 671 672 676	[G Scorpii] 35 Draconis ξ Draconis ϑ Herculis γ Draconis	3.25 5.04 3.90 3.99 2.42	K <sub>2</sub> F <sub>5</sub> K <sub>0</sub> K <sub>0</sub>	17 45 46.347 17 52 7.841 17 52 29.346 17 54 11.613 17 55 12.654	+4.0841 -2.6874 +1.0369 +2.0570 +1.3925	+ 51 +111 +110 - 1 - 13	-37 I 33.78 +76 58 19.69 +56 52 53.35 +37 15 26.57 +51 29 42.84	-1.206 -0.444 -0.580 -0.500 -0.438	+ 34 +246 + 76 + 6 - 20
674 673 677 679 678	[ξ Herculis] ν Ophiuchi 67 Ophiuchi γ Sagittarii [66 G. Apodis]	3.82 3.50 3.92 3.07 5.69	Ко Ко В 5 р Ко К 5	17 55 25.899 17 55 43.305 17 57 38.295 18 1 57.138 18 2 52.165	+2.3311 +3.3025 +3.0043 +3.8538 +8.3952	+ 62 - 6 - 4 - 41 + 43	+29 15 11.26 - 9 46 4.50 + 2 55 58.49 -30 25 35.96 -75 53 48.16	-0.416 -0.491 -0.215 -0.011 -0.021	- 19 120 10 184 279

	1								
Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in ofooor	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oo1
680 681 682 685 683	72 Ophiuchi ο Herculis μ Sagittarii [36 Draconis] [η Sagittarii]	3.73 3.83 4.01 5.03 3.16	A 3 A 0 B 8 p F 5 M 3	18 4 30.218 18 5 12.018 18 10 10.441 18 13 32.988 18 13 33.959	+2.8440 +2.3398 +3.5876 +0.3449 +4.0593	- 43 - 3 + 1 + 529 - 109	+ 9 33 14.00 +28 45 10.96 -21 4 34.75 +64 22 36.21 -36 46 53.81		+ 82 + 9 - 1 + 31 -163
684 687 686 688 689	[Grb 2533 Lyra] [δ Sagittarii] [ξ Pavonis] η Serpentis ε Sagittarii	5.42 2.84 4.25 3.42 1.95	B 5 K 0 K 2 K 0 A 0	18 13 46.683 18 17 9.146 18 17 41.882 18 18 12.221 18 20 11.374	+1.8656 +3.8410 +5.5286 +3.1037 +3.9826	$ \begin{array}{rrrr}  & - & 7 \\  & + & 31 \\  & - & 5 \\  & - & 372 \\  & - & 23 \end{array} $	+42 8 16.23 -29 51 19.66 -61 31 25.54 - 2 54 57.39 -34 24 53.61	+1.201 +1.472 +1.555 +0.896 +1.640	- 4 - 29 + 4 -697 -126
690 693 695 691 694	rog Herculis $\uparrow [\phi \text{ Draconis } m]$ $\chi \text{ Draconis}$ $\alpha \text{ Telescopii}$ $\uparrow 39 \text{ Draconis}$	3.92 4.24 3.69 3.76 4.85	Ko Aop F8 B3 A2	18 21 8.380 18 21 37.118 18 22 8.311 18 22 31.464 18 23 1.957	+2.5562 -0.8604 -1.0822 +4.4486 +0.8753	+ 137 - 18 +1168 - 17 - 55	+21 44 28.26 +71 18 23.05 +72 42 26.54 -46 0 12.44 +58 45 55.71	+1.606 +1.929 +1.576 +1.928 +2.072	-242 + 41 -357 - 42 + 60
692 696 697 700 699	[λ Sagittarii] [γ Scuti] [θ Coron. austr.] [Grb 2655 Drac] α Lyrae	2.94 4.73 4.69 5.84 0.14	K o A 3 G 5 K o A o	18 24 16.028 18 25 46.609 18 29 13.097 18 32 39.432 18 34 54.349	+3.7023 +3.4191 +4.2840 -2.8954 +2.0309	- 33 0 + 25 - 12 + 170	-25 27 23.76 -14 36 20.70 -42 21 27.82 +77 30 6.17 +38 43 36.21	+1.938 +2.249 +2.530 +2.846 +3.325	-183 $-3$ $-21$ $+2$ $-283$
701 698 702 703 704	[Grb 2640 Drac] ζ Pavonis [ε Scuti] 110 Herculis λ Pavonis	6.00 4.10 5.09 4.26 4.42	A 3 K o G 5 F 5 B 2	18 36 1.944 18 36 2.200 18 40 15.145 18 43 4.684 18 46 39.783	+0.1875 +7.0145 +3.2671 +2.5814 +5.5600	+ 17 + 14 + 13 - 12 - 11	+65 26 5.48 -71 28 58.60 - 8 20 9.99 +20 29 15.37 -62 15 32.17	+3.220 +2.983 +3.511 +3.413 +4.040	+82 $-160$ $+6$ $-335$ $-17$
705 707 706 709 711	*β Lyrae o Draconis σ Sagittarii ϑ Serpent. pr *R Lyrae	var. 4.78 2.14 4.50 var.	B8p +B2p Ko B3 A5 M3	18 47 51.790 18 50 18.942 18 51 32.723 18 53 14.153 18 53 30.480	+2.2145 +0.8851 +3.7198 +2.9822 +1.8253	- 2 + 98 + 10 + 29 + 17	+33 17 30.87 +59 18 52.32 -26 22 22.84 + 4 7 26.82 +43 51 58.13	+4.155 +4.390 +4.417 +4.653 +4.721	- 2 + 25 - 55 + 36 + 82
708 710 714 713 712	λ Telescopii [ξ² Sagittarii] [υ Draconis] γ Lyrae [ε Aquilae]	5.03 3.61 4.91 3.30 4.21	В 9 Ко Ко Аор Ко	18 53 40.006 18 54 9.029 18 55 8.276 18 56 41.856 18 56 53.886	+4.8009 +3.5787 -0.7334 +2.2437 +2.7225	+ 19 + 20 + 95 - 7 - 39	-53 I 9.28 -2I II 14.10 +7I I3 2.76 +32 36 22.00 +14 59 7.6I	+4.662 +4.680 +4.822 +4.910 +4.853	+ 8 - 14 + 47 + 1 - 74
715 716 717 719 718	†[ $\zeta$ Sagittarii $m$ ] $\zeta$ Aquilae $\lambda$ Aquilae $[\iota$ Lyrae] $\alpha$ Coron. austr.	2.71 3.02 3.55 5.13 4.12	A 2 A 0 B 9 B 5 A 2	18 58 47.715 19 2 39.074 19 3 3.847 19 5 9.537 19 5 23.534	+3.8170 +2.7569 +3.1833 +2.1402 +4.0820	- 13 - 8 - 17 - 8 + 73	-29 58 3.93 +13 46 22.50 - 4 58 26.55 +36 0 18.28 -37 59 59.21	+5.087 +5.319 +5.361 +5.624 +5.545	- I - 94 - 87 o - 99

Nr. 705. Größe: Max. 3.4, Min. 4.1. Nr. 711 Größe: Max. 4.0, Min. 4.7, Größe in Harvard 50 = 4.32.

Nr.	N a m e	Große	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in ofooor	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew.in ogoor
720 721 723 722 724	π Sagittarii †[60 G. Pavon.m] δ Draconis [43 Sagittarii] δ Lyrae	3.02 5.57 3.24 5.03 4.46	F 2 A 2 K 0 K 0	19 6 11.770 19 11 10.860 19 12 32.697 19 14 7.492 19 14 17.039	+3.5677 +6.0372 +0.0148 +3.5099 +2.0818	- I + 7 + 160 - 9 - 8	-21° 7′ 14.64 -66 46 2.92 +67 33 21.69 -19 3 41.01 +38 1 32.97	+ 5.675 + 6.109 + 6.332 + 6.357 + 6.387	- 37 - 20 + 93 - 16 + 2
725 726 729 727 728	ω Aquilae κ Cygni τ Draconis [υ Sagittarii] α Sagittarii	5.14 3.98 4.63 4.58 4.11	A 5 K o K o B 8 p + F 2 p B 8	19 14 59.939 19 15 42.934 19 16 43.015 19 18 17.469 19 19 43.919	+2.8156 +1.3861 -1.1522 +3.4355 +4.1572	- 4 + 61 - 330 - 2 + 26	+11 29 9.22 +53 15 25.49 +73 14 41.02 -16 4 9.19 -40 43 50.35	+ 6.463 + 6.626 + 6.696 + 6.711 + 6.718	+ 18 + 123 + 112 - 6 - 118
73° 73° 734 733 73°	δ Aquilae [186 G.Sagittar.] [Grb 2900 Drae] ι Cygni *β Cygni pr	3.44 5.68 6.00 3.94 3.24	F o B 9 A 2 A 2 K o + A o	19 22 28.349 19 23 9.084 19 25 21.273 19 28 11.563 19 28 18.019	+3.0244 +3.7918 -3.6290 +1.5123 +2.4190	+ 167 + 15 + 40 + 19 - 3	+ 2 59 37.41 -29 51 48.82 +79 29 3.49 +51 36 4.38 +27 49 56.90	+ 7.144 + 7.071 + 7.260 + 7.654 + 7.530	+ 84 - 45 - 31 + 129 - 4
735 736 737 738 740	[t Telescopii] 52 Sagittarii [z Aquilae] 9 Cygni [15 Cygni]	5.02 4.66 5.04 4.64 5.02	Ko B 9 B 0 F 5 Ko	19 30 46.190 19 33 3.453 19 33 39.802 19 34 49.880 19 42 6.666	+4.4516 +3.6510 +3.2271 +1.6078 +2.1631	- 16 + 51 0 - 30 + 56	-48 13 49.72 -25 1 3.62 - 7 9 44.60 +50 4 52.76 +37 12 30.11	+ 7.701 + 7.899 + 7.963 + 8.314 + 8.673	- 35 - 20 - 4 + 254 + 34
742 739 741 743 744	†δ Cygni [ν Telescopii] γ Aquilae δ Sagittae [51 Aquilae]	2.97 5.52 2.80 3.78 5.55	A 0 A 5 K 2 M 0 + A 0 F 0	19 43 5.924 19 43 7.738 19 43 24.385 19 44 42.674 19 47 28.766	+1.8749 +4.9014 +2.8518 +2.6747 +3.3011	+ 44 + 101 + 8 + 2 - 19	+44 59 0.46 -56 30 31.71 +10 27 56.85 +18 23 6.04 -10 55 1.98	+ 8.765 + 8.592 + 8.745 + 8.856 + 9.096	+ 48 - 129 + 3 + 12 + 35
745 747 746 749 <b>7</b> 48	α Aquilae †ε Draconis *[η Aquilae] β Aquilae ε Pavonis	0.89 3.99 var. 3.90 4.10	A 5 Ko Gop Ko Ao	19 47 51.318 19 48 23.095 19 49 24.966 19 52 21.913 19 53 41.352	+2.9266 -0.2008 +3.0558 +2.9464 +6.9522	+ 360 + 153 + 3 + 26 + 190	+ 8 42 30.81 +70 6 54.96 + 0 51 1.08 + 6 15 20.12 -73 4 18.32	+ 9.477 + 9.169 + 9.207 + 8.962 + 9.414	+ 387 + 39 - 4 - 478 - 130
75° 751 752 753 755	†ψ Cygni ϑ¹ Sagittarii γ Sagittae [62 Sagittarii] [ξ Telescopii]	4.80 4.39 3.71 4.60 4.86	A 3 B 3 K 5 M 3	19 54 4.670 19 55 50.053 19 56 5.249 19 58 58.281 20 2 47.865	+1.5505 +3.9050 +2.6674 +3.6894 +4.5991	- 47 0 + 42 + 27 - 15	+52 16 44.23 -35 26 24.53 +19 19 40.90 -27 52 41.48 -53 3 15.83	+ 9.542 + 9.682 + 9.754 + 9.966 +10.248	- 29 - 25 + 28 + 20 + 12
754 756 759 757 758	δ Pavonis θ Aquilae κ Cephei 31 ο¹ Cygni [33 Cygni]	3.64 3.37 4.40 3.95 4.32	G 5 A 0 B 9 K 0 + B 8 A 3	20 2 51.526 20 8 12.541 20 10 56.704 20 11 44.453 20 12 0.198	+5.8915 +3.0950 -2.0090 +1.8886 +1.3946	+1973 + 22 + 22 - 3 + 72	-66 20 14.63 - 1 0 2.77 +77 31 53.96 +46 33 30.79 +56 23 0.82	+ 9.100 +10.645 +10.866 +10.904 +11.001	$ \begin{vmatrix} -1141 \\ + & 6 \\ + & 28 \\ + & 6 \\ + & 83 \end{vmatrix} $

Nr. 732. Größe und Spektrum beziehen sich auf die hellere Komponente. Die entsprechenden Werte für die schwächere Komponente sind 5.36 und B 9. Nr. 746. Größe; Max. 3.7, Min. 4.5.

Nr.	Name	Größe	Spektrum	<b>A</b> R. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o‱	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in
760 761 762 763 765	24 Vulpeculae α² Capricorni [β Capricorni] [κ¹ Sagittarii] γ Cygni	5.45 3.77 3.25 5.64 2.32	Ko G 5 G 0 + A 0 A 0 F 8 p	h m 8 20 14 12.952 20 14 43.595 20 17 38.494 20 18 23.422 20 20 4.406	+2.5668 +3.3284 +3.3705 +4.0749 +2.1528	+ 9 + 41 + 26 + 32	+24 29 6.72 -12 43 55.94 -14 58 20.13 -42 14 24.91 +40 3 49.37	+11.065 +11.123 +11.332 +11.295 +11.504	- 14 + 6 + 3 - 88 + 1
764 766 767 768 770	α Pavonis †[ρ Capric.] θ Cephei ε Delphini 73 Draconis	2.12 4.96 4.28 3.98 5.18	B 3 F 0 A 5 B 5 A 2 p	20 20 54.781 20 25 26.380 20 28 34.621 20 30 20.735 20 32 19.260	+4.7501 +3.4217 +1.0072 +2.8658 -0.7843	+ II - I2 + 60 + 4 - I0	-56 55 44.93 -18 0 48.14 +62 47 31.35 +11 5 53.62 +74 44 57.66	+11.482 +11.865 +12.092 +12.210 +12.350	<ul> <li>82</li> <li>20</li> <li>11</li> <li>17</li> <li>11</li> </ul>
769	α Indi	3.21	K o	20 33 21.298	+4.2217	+ 50	-47 30 8.04	+12.508	+ 72
771	†β Delphini m	3.72	F 5	20 34 44.070	+2.8129	+ 73	+14 23 7.21	+12.499	- 30
772	[κ Delphini]	5.23	G 5	20 36 12.852	+2.9134	+ 210	+ 9 52 25.26	+12.651	+ 21
773	υ Capricorni	5.33	M o	20 36 38.161	+3.4152	- 15	-18 21 4.41	+12.641	- 18
774	α Delphini	3.86	B 8	20 36 51.003	+2.7862	+ 41	+15 41 57.47	+12.674	+ 1
777 775 776 778 779	α Cygni β Pavonis [η Indi] [δ Delphini] [ψ Capricorni]	1.33 3.60 4.70 4.53 4.26	A 2 p A 5 F o A 5 F 8	20 39 23.096 20 39 34.569 20 39 38.616 20 40 39.401 20 42 32.765	+2.0448 +5.4150 +4.4084 +2.8006 +3.5524	- 64 + 172 - 16 - 40	+45 3 54.49 -66 25 14.34 -52 8 12.83 +14 51 29.71 -25 29 16.30	+12.848 +12.876 +12.808 +12.889 +12.901	+ 5 + 18 - 54 - 40 - 155
780	ε Cygni	2.64	Ko	20 43 46.899	+2.4271	+ 283	+33 44 40.48	+13.466	+ 329
782	[6 H. Cephei]	4.63	Go	20 43 51.743	+1.4888	- 87	+57 21 49.89	+12.908	- 234
783	η Cephei	3.59	Ko	20 44 4.296	+1.2210	+ 130	+61 36 19.11	+13.977	+ 822
781	ε Aquarii	3.83	Ao	20 44 25.740	+3.2475	+ 20	- 9 42 59.84	+13.149	- 31
784	†λ Cygni m	4.47	B 5	20 45 4.168	+2.3365	+ 3	+36 16 9.66	+13.218	- 3
785	β Indi	3.72	K o	20 50 8.150	+4.6933	+ 23	-58 40 55.57	+13.533	- 19
786	32 Vulpeculae	5.24	K 5	20 52 0.061	+2.5566	- 6	+27 49 42.50	+13.673	+ 2
788	ν Cygni	4.04	A o	20 54 56.053	+2.2362	+ 5	+40 56 7.39	+13.848	- 9
789	[11 Aquarii]	6.26	G o	20 57 24.282	+3.1586	+ 26	- 4 57 47.25	+13.881	- 132
787	[α Octantis]	5.24	F 2	20 57 31.277	+7.2967	+ 29	-77 15 18.03	+13.660	- 362
790	ζ Microscopii	5·35	F o	20 59 8.274	+3.8348	- 25	-38 52 1.35	+14.012	- 109
792	[ξ Cygni]	3·92	K 5	21 2 44.776	+2.1818	+ 4	+43 41 15.77	+14.347	+ 5
791	[A Capricorni]	4.60	M o	21 3 37.297	+3.5094	- 21	-25 14 48.92	+14.353	- 43
793	61 Cygni pr	5·57	K 5	21 4 12.248	+2.6870	+3504	+38 27 12.24	+17.690	+3259
794	ν Aquarii	4·52	K o	21 6 19.626	+3.2679	+ 61	-11 36 56.75	+14.548	- 12
795	Br 2777 Ceph †[Grb 3415 m] ζ Cygni [23 G. Indi] †[τ Cygni]	5.90	B 9	21 6 43.988	-1.1919	+ 60	+77 53 0.77	+14.618	+ 36
798		5.65	B 2	21 10 16.575	+1.5272	- 6	+59 44 21.38	+14.793	- 2
797		3.40	K o	21 10 22.827	+2.5528	- 4	+29 58 47.88	+14.748	- 53
796		5.84	A 5	21 11 29.387	+4.2864	+ 18	-53 30 45.74	+14.856	- 11
799		3.82	F o	21 12 23.619	+2.3944	+ 132	+37 47 18.62	+15.356	+ 437

Nr.	N a m e	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in ofocoi	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oor
800 801 802 803 804	α Equulei [ε Microscop.] [9¹ Microscop.] α Cephei 1 Pegasi	m 4.14 4.79 4.92 2.60 4.24	F 8 + A 3 A 0 A 2 p A 5 K 0	12 12 49.450 21 14 18.242 21 16 55.753 21 17 8.855 21 19 18.603	+2.9988 +3.6385 +3.8387 +1.4319 +2.7742	+ 36 + 39 + 56 + 212 + 72	+ 4 59 55.64 -32 25 27.83 -41 3 51.75 +62 19 51.23 +19 32 48.87	+14.862 +15.010 +15.181 +15.245 +15.384	- 83 - 21 - 1 + 52 + 68
805	γ Pavonis	4.30	F 8 G 5 p K 0 B 1 G 0	21 21 30.547	+4.9700	+ 155	-65 38 21.25	+16.239	+ 799
806	ζ Capricorni	3.86		21 23 14.684	+3.4258	+ 1	-22 40 20.19	+15.563	+ 27
807	[71 Cygni]	5.34		21 27 13.947	+2.2135	+ 42	+46 16 31.25	+15.862	+ 108
809	β Cephei	3.32		21 27 53.598	+0.7763	+ 21	+70 17 49.84	+15.802	+ 13
808	β Aquarii	3.07		21 28 24.068	+3.1581	+ 12	- 5 50 9.93	+15.813	- 4
811	74 Cygni	5.09	A 5	21 34 32.462	+2.4042	- 7	+40 8 35.98	+16.160	+ 19
810	ν Octantis	3.74	Ko	21 34 53.060	+6.7035	+ 184	-77 39 29.69	+15.920	- 240
812	[γ Capricorni]	3.80	Fop	21 36 46.134	+3.3241	+ 131	-16 56 3.60	+16.234	- 22
813	[13 H. Cephei]	5.64	Oe5	21 37 5.782	+1.8610	- 7	+57 13 1.84	+16.273	0
817	[11 Cephei]	4.85	Ko	21 41 2.936	+0.8807	+ 235	+71 2 5.97	+16.576	+ 105
815	$\varepsilon$ Pegasi [ $\iota$ Pisc. austr.] $\dagger$ [ $\varkappa$ Pegasi $m$ ] [ $\lambda$ Capricorni] $\delta$ Capricorni	2.54	K o	21 41 14.291	+2.9462	+ 18	+ 9 35 56.68	+16.486	+ 5
814		4.35	A o	21 41 22.687	+3.5750	+ 29	-33 18 1.98	+16.398	- 91
816		4.27	F 5	21 41 55.548	+2.7164	+ 23	+25 22 6.57	+16.531	+ 15
818		5.43	A o	21 43 18.393	+3.2294	+ 17	-11 38 36.71	+16.580	- 4
819		2.98	A 5	21 43 43.880	+3.3114	+ 181	-16 24 1.69	+16.312	- 293
821	π² Cygni	4.26	B 3	21 44 34.408	+2.2160	+ 2	+49 I 52.73	+16.648	+ 2
820	[o Indi]	5.50	K 2	21 45 44.718	+5.0877	- 44	-69 54 35.79	+16.701	- 3
822	γ Gruis	3.16	B 8	21 50 18.104	+3.6341	+ 85	-37 38 52.51	+16.907	- 13
823	16 Pegasi	5.05	B 3	21 50 19.777	+2.7295	+ 2	+25 38 31.58	+16.924	+ 3
824	[δ Indi]	4.56	F 0	21 53 50.919	+4.0876	+ 63	-55 16 43.84	+17.081	- 3
826	[20 Pegasi]	5.66	F 2	21 58 9.863	+2.9223	+ 35	+12 49 54.56	+17.233	$ \begin{array}{rrrr}  - & 46 \\  -2554 \\  - & 4 \\  + & 64 \\  - & 53 \end{array} $
825	[ε Indi]	4.74	K 5	21 58 47.112	+4.5932	+4809	-57 2 1.07	+14.753	
827	α Aquarii	3.19	G 0	22 2 42.136	+3.0811	+ 10	- 0 36 43.42	+17.473	
830	20 Cephei	5.39	K 5	22 3 10.925	+1.8232	+ 21	+62 29 33.07	+17.560	
828	ι Aquarii	4.35	B 8	22 3 11.906	+3.2401	+ 26	-14 9 41.58	+17.445	
831	[t Pegasi]	3.96	F 5	22 4 12.900	+2.7924	+ 215	+25 3 4.98	+17.569	+ 28
829	α Gruis	2.16	B 5	22 4 27.637	+3.7835	+ 123	-47 15 8.60	+-17.404	- 147
832	[μ Pisc. austr.]	4.62	A 2	22 4 53.285	+3.5016	+ 64	-33 16 55.85	+17.532	- 37
833	[27 Pegasi]	5.65	K 0	22 6 33.913	+2.6579	- 49	+32 52 42.92	+17.576	- 63
834	ϑ Pegasi	3.70	A 2	22 7 10.335	+3.0259	+ 181	+ 5 54 7.31	+17.701	+ 37
835 837 836 838 839	π Pegasi 24 Cephei ζ Cephei [λ Pisc. austr.] [ε Octantis]	4.38 4.99 3.62 5.40 5.11	F 5 G 5 K 0 B 9 M 3	22 7 19.155 22 8 39.467 22 8 46.120 22 10 54.953 22 13 25.421	+2.6640 +1.1538 +2.0806 +3.4014 +6.7765	- 13 + 63 + 14 + 20 + 304	+32 52 59.4I +72 2 43.8I +57 54 18.08 -28 3 54.48 -80 44 23.06	+17.654 +17.739 +17.738 +17.816 +17.882	- 17 + 14 + 8 - 34

Nr.	Name	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o!ooor	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in
840 841 842 843 844	<ul> <li>θ Aquarii</li> <li>α Tucanae</li> <li>γ Aquarii</li> <li>[31 Pegasi]</li> <li>β Lacertae</li> </ul>	4.32 2.91 3.97 4.93 4.58	Ко К2 Ао Взр Ко	h m 8 22 13 40.110 22 14 24.561 22 18 33.438 22 18 33.776 22 21 11.728	+3.1658 +4.1170 +3.0985 +2.9527 +2.3584	+ 78 - 83 + 85 + 2 - 20	-8 4 57.94 -60 33 34.09 - 1 41 25.13 +11 54 8.53 +51 55 40.56	+17.907 +17.920 +18.125 +18.130 +18.025	- 19 - 34 + 12 + 17 -185
845 846 847 848 849	[ν Gruis] [δ¹ Gruis] *[δ Cephei] α Lacertae [ν Aquarii]	5.48 4.02 var. 3.85 5.29	Ko G 5 verän. A o F 5	22 25 8.575 22 25 41.464 22 26 56.250 22 28 48.847 22 31 24.859	+3.5181 +3.5879 +2.2261 +2.4707 +3.2821	÷ 31 + 24 + 11 + 139 + 155	-39 26 9.59 -43 48 9.98 +58 6 27.40 +49 58 24.89 -21 0 58.32	+18.195 +18.373 +18.417 +18.501 +18.422	$ \begin{array}{r} -156 \\ + 2 \\ + 3 \\ + 22 \\ -143 \end{array} $
850 851 853 852 854	η Aquarii [31 Cephei] [30 Cephei] 10 Lacertae [ε Pisc. austr.]	4.13 5.22 5.21 4.91 4.22	B 8 F 0 A 2 O e 5 B 8	22 32 16.384 22 34 17.152 22 36 30.957 22 36 33.860 22 37 20.449	+3.0827 +1.4816 +2.1266 +2.6914 +3.3191	+ 60 + 390 - 12 - 1 + 21	- 0 25 38.26 +73 19 53.49 +63 16 19.97 +38 44 14.98 -27 21 25.42	+18.544 +18.689 +18.709 +18.727 +18.760	- 50 + 30 - 20 - 3 + 6
855 856 857 858 859	ζ Pegasi β Gruis η Pegasi [13 Lacertae] λ Pegasi	3.61 2.24 3.10 5.24 4.14	B8 M3 Go Ko	22 38 28.079 22 39 5.596 22 40 11.146 22 41 24.618 22 43 38.270	+2.9920 +3.5851 +2.8118 +2.6747 +2.8893	+ 53 + 133 + 9 - 10 + 39	+10 3I 3.54 -47 II 56.I5 +29 54 25.I4 +4I 30 I4.34 +23 I4 57.98	+18.782 +18.805 +18.819 +18.888 +18.936	$ \begin{array}{rrr}     - & 7 \\     - & 3 \\     - & 22 \\     + & 11 \\     - & 6 \end{array} $
860 861 862 863 864	ε Gruis [τ Aquarii] [μ Pegasi] ι Cephei λ Aquarii	3.69 4.21 3.67 3.68 3.84	A 2 K 5 K 0 K 0 M 0	22 44 56.430 22 46 24.989 22 47 6.238 22 47 32.242 22 49 29.085	+3.6269 +3.1765 +2.8952 +2.1337 +3.1297	+ III - 10 + 106 - 113 + 5	-51 37 58.24 -13 54 35.05 +24 17 3.69 +65 53 4.49 - 7 53 57.66	+18.920 +18.989 +19.003 +18.932 +19.142	- 59 - 31 - 36 - 118 + 40
865 866 867 868 869	<ul> <li>ρ Indi</li> <li>δ Aquarii</li> <li>α Pisc. austr.</li> <li>[ζ Gruis]</li> <li>ο Androm.</li> </ul>	6.14 3.51 1.29 4.18 3.63	Mo A2 A3 G5 B5 +A2p	22 50 30.870 22 51 28.068 22 54 20.376 22 57 20.884 22 59 9.280	+4.1852 +3.1841 +3.3163 +3.5455 +2.7593	- 73 - 29 + 258 - 74 + 18	-70 23 41.14 -16 8 25.30 -29 56 26.42 -53 4 34.65 -42 0 11.79	+19.204 +19.134 +19.068 +19.296 +19.343	+ 74 - 20 -159 - 4 + 2
870 871 872 874 873	<ul> <li>β Pegasi</li> <li>α Pegasi</li> <li>†ϑ Gruis</li> <li>†π Cephei</li> <li>88 Aquarii</li> </ul>	2.61 2.57 4.35 4.56 3.80	M o A o F 5 G 5 K o	23 0 51.692 23 1 46.180 23 3 30.374 23 5 58.896 23 6 14.993	+2.9078 +2.9880 +3.3821 +1.9057 +3.1992	+ 141 + 42 - 40 + 21 + 39	+27 45 25.26 +14 52 55.47 -43 50 41.30 +75 3 46.94 -21 29 54.19	+19.524 +19.364 +19.422 +19.468 +19.535	+143 - 36 - 16 - 21 + 40
875 876 877 878 879	Br 3077 Cass [25 G. Tucanae] γ Tucanae [γ Piscium] γ Sculptoris	5.65 5.69 4.10 3.85 4.51	K 2 G 0 F 2 K 0 K 0	23 10 22.980 23 13 22.158 23 13 56.418 23 14 3.230 23 15 35.305	+2.8862 +3.6128 +3.5054 +3.1100 +3.2409	+2522 $+252$ $-38$ $+506$ $+17$	+56 50 12.65 $-62 19 42.85$ $-58 33 53.58$ $+ 2 57 15.08$ $-32 51 32.74$	+19.875 +19.606 +19.735 +19.667 +19.608	+299 - 24 + 94 + 24 - 60

Nr. 847. Größe: Max. 3.7, Min. 4.6; Spektrum wechselt von F 5 bis G o.

Nr.	N a m e	Größe	Spektrum	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in ofooor	Dekl. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in o"oo1
880 882 881 883 884	τ Pegasi 4 Cassiopeiae [υ Pegasi] [ο Gruis] × Piscium	4.65 5.20 4.57 5.54 4.94	A 5 K 5 G o F o A 2 p	23 17 39.808 23 22 9.678 23 22 22.848 23 23 15.613 23 23 51.329	+2.9690 +2.6618 +2.9938 +3.3590 +3.0753	$\begin{array}{c} + 21 \\ + 7 \\ +137 \\ + 25 \\ + 56 \end{array}$	+23 24 42.14 +61 57 11.71 +23 4 24.93 -53 3 14.15 + 0 55 36.95	+19.701 +19.765 +19.816 +19.920 +19.705	$ \begin{array}{rrr}  - 2 \\  - 6 \\  + 42 \\  + 133 \\  - 90 \end{array} $
885 886 887 888 890	70 Pegasi [β Sculptoris] †[72 Pegasi m] [248 G. Aquarii] [λ Androm.]	4.67 4.46 5.21 6.51 4.00	Ko B9 K2 Ko	23 26 7.065 23 29 45.513 23 30 58.267 23 32 26.349 23 34 37.153	+3.0339 +3.2183 +2.9755 +3.0947 +2.9348	+ 42 + 73 + 38 - 3 + 152	+12 25 45.98 -38 9 1.19 +30 59 38.46 - 7 47 47.83 +46 7 58.78	+19.864 +19.891 +19.871 +19.924 +19.505	+ 39 + 21 - 12 + 25 -416
889 891 892 893 894	[11 G. Phoenicis] ι Androm. ι Piscium γ Cephei ω² Aquarii	4.86 4.28 4.28 3.42 4.62	A 2 B 8 F 8 K o A o	23 34 37·570 23 35 11·179 23 36 51·742 23 36 51·869 23 39 36·695	+3.2312 +2.9412 +3.0856 +2.4548 +3.1112	+64 $+23$ $+249$ $-213$ $+66$	-45 49 28.04 +42 56 8.86 + 5 18 3.49 +77 17 50.87 -14 52 36.53	+19.916 +19.929 +19.510 +20.099 +19.900	$ \begin{array}{r} -5 \\ +3 \\ -432 \\ +157 \\ -64 \end{array} $
895 896 897 898 899	41 H. Cephei Lac. δ Sculpt. [268 G. Aquarii] φ Pegasi [ρ Cassiopeiae]	5.02 4.64 6.08 5.23 4.85	A o A o K o M o F 8 p	23 45 1.566 23 45 48.218 23 47 8.963 23 49 25.905 23 51 22.444	+2.8644 +3.1259 +3.0959 +3.0517 +2.9947	+ 13 + 81 + 92 - 5 - 7	+67 28 24.26 -28 27 43.66 -10 18 33.07 +18 47 13.42 +57 9 56.25	+20.004 +19.905 +20.090 +19.992 +20.034	+ 3 -100 + 79 - 30 + 5
900 901 902 903 904	[27 Piscium] [π Phoenicis] ω Piscium ε Tucanae [ϑ Octantis]	5.07 5.14 4.03 4.71 4.73	Ко Ко F <sub>5</sub> В9 Ко	23 55 36.052 23 55 49.660 23 56 13.686 23 56 48.772 23 58 32.469	+3.0716 +3.1109 +3.0807 +3.1233 +3.0955	- 33 + 56 + 101 + 89 - 151	-3 53 19.86 -53 4 51.42 +6 31 52.12 -65 54 39.19 -77 23 48.45	+19.974 +20.109 +19.933 +20.023 +19.883	- 66 + 69 - 108 - 19 - 160

Von den Sternen, deren Namen eingeklammert sind, folgen keine Ephemeriden. Ein † vor dem Namen eines Sternes deutet darauf hin, daß dieser Stern in Zukunft nicht mehr als Fundamentalstern gelten soll. Vgl. Astron. Nachr. Bd. 231, S. 309.

Nr. Name Größe murayads	AR. 1940.0	Jährl. Verände- rung	Jährl. Eigen- bew. in ofoor	Dekl. 1940.0	Jährl. Verände- rung 1940.5	Jährl. Eigen- bew. in o!'001
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#### Nördliche Polsterne

Na Nb Nc Nd Ne	43 H. Cephei α Ursae min. *Grb 750 Ceph 51 H. Cephei 1 H. Dracon.	m 4.52 2.12 6.70 5.26 4.58	K o F 8 F 8 M o K 2	1 0 9.64 1 42 34.16 4 16 52.60 7 13 7.74 9 28 41.70	+ 8.039 +35.857 +18.033 +28.445 + 8.608	+ 77 +170 + 17 - 47 - 7	+85 56 10.91 +88 58 44.26 +85 23 37.04 +87 8 39.70 +81 35 39.16	+19.349 +18.054 + 8.734 - 6.341 -15.854	- 6 - 4 + 29 - 35 - 18
$egin{array}{c} Nf \\ Ng \\ Nh \\ Ni \\ Nk \\ \end{array}$	30 H. Camel. ε Ursae min. δ Ursae min. λ Ursae min. 76 Draconis	5·34 4·40 4·44 6·55 5·69	F 2 G 5 A 0 M 3 A 0	10 23 56.58 16 52 2.49 17 51 32.85 18 34 9.77 20 47 3.07	+ 7.369 - 6.175 -19.469 -76.313 - 4.298	- 44 + 6 + 12 -112 + 14	+82 51 55.08 +82 8 20.53 +86 36 43.10 +89 2 39.26 +82 18 38.84	-18.286 $-5.857$ $-0.698$ $+2.924$ $+13.374$	+ 25 + 4 + 54 + 3 + 27

Nr. Nc. Größe aus Harvard 54 entnommen.

#### Südliche Polsterne

Sa Sb Sc Sd Se	4 G. Octantis ξ Mensae ζ Octantis ι Octantis 20 G. Octantis	5.63 5.85 5.38 5.38	Ko Ko Fo Ko	1 40 39.77 5 5 37.66 9 5 47.16 12 48 27.66	- 3.492 - 6.866 - 8.536 + 6.204	+ 22 - 3 - 91 + 46	-85 4 24.43 -82 33 13.98 -85 25 33.46 -84 47 53.05	+18.167 + 4.726 -14.486 -19.571	+ 25 + 10 + 36 + 24
St St Sh Si Sk	26 G. Octantis  χ Octantis  σ Octantis  β Octantis  τ Octantis	6.52 6.13 5.22 5.48 4.34 5.56	A 2 K 0 F 0 F 0 K 0	14 56 36.85 16 38 6.82 18 19 52.45 20 1 45.73 22 40 3.05 23 19 51.75	+28.432 +22.260 +35.541 +82.270 +6.177 +9.177	-177 + 10 - 74 + 134 - 23 + 28	-87 54 29.74 -86 15 47.07 -87 39 28.58 -89 10 5.09 -81 41 49.51 -87 48 45.03	-14.434 $-6.995$ $+1.631$ $+10.202$ $+18.847$ $+19.749$	- 68 0 -130 - 4 + 9 + 11



m.	ag	I) a And	romedae	2) β Cass	siopeiae	3) ε Pł	noenicis	7) Y P	egasi
	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	oh 5 <sup>m</sup>	+28°45'	oh 5 <sup>m</sup>	+58° 49′	oh 6m	-46° 4'	o <sub>p</sub> io <sub>m</sub>	+14° 50′
Jan.	0	T7.452	44.88 06	58.871 320	27.74 76	21.052	54.55	0.052	67"11 80
oun.	10	17.45 <sup>2</sup> 147 17.305 142	43.92 123	58.551	27.74 76 26.98 <sub>128</sub>	21.953 <sub>209</sub> 21.744 <sub>193</sub>	54.20	9.053 <sub>126</sub> 8.927 <sub>120</sub>	66 22
	20	17.163	42 60	58.551 309	25.70	21.744 193		8.807 110	
	30	17.033 130	42.69 143 41.26 159	58.242 <sub>286</sub> 57.956 <sub>249</sub>	25.70 175 23.95 214	21.551 <sub>172</sub> 21.379 <sub>146</sub>	53.57 116 52.41 157	I 8.607	65.23 107
Febr.	9	16.921 88	39.67 168	57.707 202	21.81 246	21.233 115	50.84 157	8 60T	
1001.	9				1	21.233 115		70	63.05 109
	19	16.833	37.99 170	57.505 142	19.35 268	21.118 77	48.90 226	8.525	61.96
	29	16.776 21	36.29 161	57.363 74	16.67 278	21.041 35	40.04	8.475 18	60.95 89
März	10	16.755 20	34.65	57.289	13.89 276	21.006	44.10	8.457 18	60.06
	20	16.775 65	33.16	57·290 80	11.13 264	21.017 60	41.35	8.475 57	59.35 48
	30	16.840	31.88 100	57.370 160	8.49 241	21.077	38.43 303	8.532 99	58.87 21
Apr.	9	16.952 158	30.88 <sub>68</sub>	57.530 238	6.08 209	21.188 163	35.40 308	8.631 <sub>141</sub>	58.66
	19	17.110 202	30.20 31	57.768	3.99 169	21.351	32.32	0.772	58.75
	29	17.313	20.80	50.077 272	2.30 122	21.564	29.28	8.954	59.16 72
Mai	9	17.557 277	29.96 7	50.449	1.08 72	21.825	20.32 281	9.174	59.88 102
	19	17.834 305	30.43 85	58.874 466	0.36	22.129 340	23.51 258	9.427 280	60.90 131
	29	18.130	27.28	59.340 492	0.16	22.469 368	20.93 230	0.707	62.21 156
Juni	8	1 10.404	32.50 122	EO X22	34	22.837 387	18.63	10.006 311	63.77 178
	18	18.799 337	34.04 183	60.338 505	1.35 135	23.224 395	16.68	10.317 314	65.55 193
	28	19.136 337	35.87 207	60.843	2.70 180	23.619 394		TO 62T	67.48 204
Juli	8	19.465 313	37.94 225	61.333 464	4.50 221	24.013 394	T2 08 113	TO 040	69.52 210
	-0						00	495	
	18	19.778 289	40.19 237	61.797 427	6.71 256	24·394 <sub>358</sub>	13.30 19	11.235 274	71.62 210
A	28	20.067 260	42.56 244	02.224	9.27	24.752 324	13.11	11.509 248	73.72 205
Aug.	7	20.327 224	45.00 246	02,000	12.12 308	25.076 284	13.40 75	11.757 216	75.77 196
	17	20.551 186	47.46	02.933 260	15.20	25.360 <sub>235</sub>	14.15 119	11.973 181	77.73 182
	27	20.737	49.87 232	63.202 206	18.44 333	25.595 182	15.34 158	12.154 143	79-55 166
Sept.	6	20.882	52.19 220	63.408 142	21.77 335	25.777 125	16.92	12.297 104	81.21 146
	16	20.986 64	54.39 202	63.550 77	45.14	25.902 68	18.83	12.401 67	02.07
	25	21.050 25	56.41 ,82	63.627	28.43 319	25.970 12	20.99 232	<sup>23</sup> 12.468 <sub>31</sub>	03.92
Okt.	5	21.075	58.23	63.642	31.02 201	25.982 41	23.31	12.499	04.95 80
	15	21.005 42	59.82	63.598 101	34.63 276	25.941 88	25.71 236	12.497 31	85.75 57
	25	21.023	61.16	63.497	37.39 245	25.853 130	28.07 224	12.466	86.32 35
Nov.	4	20.053	62 22	03.345	39.84 208	25.723	30.31 203	T2 4T0	86.67
	14	20.859 113	62.00	03.140	41.92 165	25.560 <sub>189</sub>	32.34 173	12.333 77	86.80
	24	20.746	62.46 4/	04.900	43.57	25.371 206	34.07	12.238 95	86.72
Dez.	4	20.617	$63.61 \frac{15}{18}$	62.632 300	44.74 66	25.165 216	35·44 <sub>95</sub>	12.129 118	86.43 47
	14	20.476	62.12		45 40		26.20	12 011	8= 06
	24	20.329	62.04	62.332 318 62.014 324	45.52	24.949 <sub>219</sub>	26.00	11.887	8- 22
	34	20.179	62.15	61.690 324	45.09 43	24.730 <sub>213</sub> 24.517	36.93	11.760	84.51
351							1		
Mittl.		16.833	33.33	57.715	8.15	22.325	41.94	8.554	60.41
sec δ,			+0.549		+1.653	1.442	-1.038		+0.265
a,		·	+20.0		+20.0	+3.0	+20.0	+3.1	+20.0
Ь,	D.	0.01	- 0.02	+0.11	0.03	-0.07	- 0.03	+0.02	- 0.01

m.	ag	9) 1	Ceti	10) ζ T	ucanae	11) β	Hydri	12) a Ph	oenicis
1.	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	oh 16m	-9° 8′	o <sub>p</sub> 10 <sub>m</sub>	-65° 13'	oh 22 <sup>m</sup>	-77° 34′	oh 23 <sup>m</sup>	-42° 37′
Jan.	0	22 707	84.87 62	56.41	54.55	8 25 22	100.11	10.212	66.21
Jan.	10	22.501		56.00	54.55 70	35.23 90	108.18	19.213 199	66.21
	20	22.380 116	85.49	55.61 39	53.85 126	34.33 85	106.18	19.014 189	66 45
		22.264 107	85.96 31 86.27 12	55.01 35	52.59 178	33.48 78	106.67 206	18.825 172	64.88
Febr.	30	22.157 93		55.26 30	50.81 225	32.70 68	104.61	18.653 152	62 -8
rebi.	9	22.064 74	86.39 8	54.96 24	48.56 266	32.02 56	102.07 295	18.501 125	63.58 168
	19	21.990 51	86.31 28	54·72 18	45.90 301	31.46	99.12 328	18.376 92	61.90 202
	29	21.939 22	86.03 51	54.54 11	42.89	31.04 29	95.84	18.284 55	59.88 272
März	10	21.917 12	85.52 75	54.43 4	39.02	30.75 14		18.229 12	57.50 257
	20	21.929 48	84.77 98	54.39	3 200	30.61	88.01	18.217 35	54.99 276
	30	21.977 88	83.79 122	54.43	32.56 363	30.62	84.83 378	18.252 84	52.23 291
Apr.	9	22.065 128	82.57	54.56 21	28.93 359	30.79 32	81.05 370	18.336 134	49.32 299
	19	22.193 168	81.13 164	54.77 29	25.4/1 ~	31.11 48	11:33	18.470 .0.	46.33 302
	29	22.301	79.49 182	55.06	21.80	31.59 61	73.02 220	10.054	43.31 296
Mai	9	22.567	77.67 195	55-42 43	18.57 303	32.20	70.52 298	10.000	40.35 285
	19	22.805 267	75.72 203	55.85 49	15.54 269	32.94 <sub>85</sub>	67.54 261	19.161 275	37.50 268
	29	23.072 288	73.69 208		12.85 230	22.70	64.93 216	19.474 342	34.82 243
Juni	8	22.200	71.61 206	56.34 56.88 54	10.55 186	34·74 <sub>101</sub>	62.77 168	19.816 342	32.39 213
o um	18	22 662	69.55	57·45 59	8.69 136	35.75 106	61.09 114	20.179 376	20.06
	28	23.002 308	67.56 187	58.04 59	7.22	36.81	50.05	20,555 377	28 10 1/1
Juli	8	24.275 295	65.69 170	58.63 59	7.33 8 <sub>3</sub> 6.50 <sub>28</sub>	37.88 106	59.95 <sub>58</sub> 59.37 <sub>1</sub>	20.932 368	27.12
								308	9-
	18	24.570 277	63.99	59.22	6.22	38.94 101	59.36 57	21.300 349	26.20 45
	28	24.847	02.52	50.77	6.50 82	39.95	59.93 113	21.049 222	25.75 z
Aug.	7	25.098 221	01.29 06	00.28	7.32	40.89 83	61.06	21.071 .0.	25.77 49
	17	25.319 .8-	60.33 66	00.73 20	8.66	41.72 71	62.71	22.256 242	26.26 95
	27	25.506 149	59.67 36	61.11 29	10.47 222	42.43 55	64.83 252	22.498 194	27.21 135
Sept.	6	25.655 110	59.31 7	61.40	12.69 254	42.98 38	67.35 283	22.692 142	28.56 171
	16	25.765 72	59.24 19	61.61	15.23	43.36	70.18	22.834 88	30.27 200
	25*)	25.837 36	59.43 42	61.72 2	18.01	43.56 I	73.22 314	2722.922 36	32.27 221
Okt.	5	25.873 1	59.85 63	61.74	20.91	43.57 18	7 3 211	22.958 13	34.48
	15	25.874 28	60.48 78	61.66	23.83 281	43.39 35	79-47 296	22.945 59	36.80 234
	25	25.846	61.26	61.50 24	26.64 260	43.04 51	82.43 270	22.886 99	39.14 227
Nov.	4	27 707 33	62.16	61.26	29.24 228	12 52 3"	05.13	22.787	41.41
	14	25 775	63.13	1 00.95 -7	31.52 186	17 88	87.45 186	22.653 160	43.51 185
	24	25.621 106	64.10	60.59 39	22 28	ATTT	89.31 131	22.493 180	45.36 152
Dez.	4	25.515 116	65.05 95	60.20 39	33·36 <sub>138</sub> 34·76 <sub>83</sub>	40.26 90	90.62 72	22.313 194	46.88
	14		65.06	50.78	25 50	30.36	OT 24	22.119 201	48.03
	24	25.399 121	66.77		$35.85 \frac{26}{35.85}$	- 23	91.44	21.918 200	48.76
	34	25.278 <sub>122</sub> 25.156	67.48	59.36 58.94	35.52 33	38.43 92 37.51	90.90 54	21.718	49.05
Miller	_					_			
Mittl		22.219	82.85	57.48	37.98	37.83	91.15	19.376	53.66
sec δ,		1.013	-0.161	2.387	-2.167	4.654	-4.545	1.359	-0.921
a,		+3.1	+20.0	+2.9	+20.0	+2.5	+19.9	+2.9	+19.9
b,	0	-0.01	- 0.07	-0.14	- 0.07	-0.30	- 0.10	-0.06	- 0.10

<sup>\*)</sup> Bei Stern II) und I2) lies Sept. 26.

T	9.07	13) 12	2 Ceti	17) ζ Cass	siopeiae	18) π And	lromedae	20) δ And	romedae
1.		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Deki.
19	40	oh 26 <sup>m</sup>	-4° 16′	oh 33 <sup>m</sup>	+53° 33′	oh 33 <sup>m</sup>	+33° 23′	oh 36 m	+30° 31
Jan.	0	58.942	79.60	38.215 268	78.69	41.034 162	33.51	7.633	69.48
	10	-0 000	80.20	37.947 <sub>268</sub>	78.19	40.872 163	32.77 74	7.470	68.74
	20	58.704 112	80.00	27 670	77.20	40.700	21.72	7·479 155	67 72
		58.592 99	81.38	37.679 <sub>257</sub>	77.26 144	40.709 157	31.73 131	7.324 150	67.72 12
Febr.	30	-8 107		37.422 235	75.76 183	40.552 143	30.42	7.174 137	66.46
rebr.	9		81.72	37.187 200	73.93 216	40.409 121	28.89 168	7.037 117	65.01 15
	19	58.411 60	81.89	36.987 155	71.77 238	40.288	27.21 176	6.920	63.43 16
	29	58.351 31	81.88	36.832 <sub>101</sub>	60.30	40.195 56	25.45	6.830	01.78 ,6
März	10	58.320	8r.66 45	36.731 <sub>38</sub>	00.00 252	40.139 14	23.08	6.774 14	00.15
	20	58.321 28	81.21 69	36.693 30	1 04.35 246	40.125	21.99	6.760 $\frac{1}{31}$	50.00 13
	30	58.359 78	80.52	36.723 101	61.89 227	40.158 83	20.46	6.791 79	57.22 11
Apr.	9	58.437 118	79.59 116	36.824 171	59.62 200	40.241	19.15 101	6.870 128	56.07 8
	19	58.555 159	78.43	36.995 <sub>239</sub>	57.62 165	40.375 183	18.14 68	6.998 176	55.20
	29	58.714 197	77.04 160	37.234 300	55.97 123	40 558	T7 46	7.174 221	54.67
Mai	9	58.911 232	75.44	37·534 <sub>353</sub>	CA 71	40.787 269	17.16	7·395 <sub>261</sub>	54.40
	19	59.143 260	73.67	37.887 353	53.96 30	41.056 302	17.25 49	7.656	54.70 5
	29	59.403 283		38.284 428	53.66	41.358 328	17.74 88	7.950 319	== 28
Juni	8	59.686 299	71.77 <sub>199</sub> 69.78 <sub>202</sub>	38.712 448	Fa 9 " "	41.686	18.62	I X 200	56.23 12
O ttill	18	59.085	67.76	30.712 448		42.020 343	10.85	8.604	E7 52
	28	59.985 305	67.76	39.160 456	54.53 115	42.029 343	19.85 156	8.604 343 8.947 340	57.52
Juli	8	60.290 304	65.76	39.616 451	55.68	42.379 347	21.41 184	0.947 340	59.11 18
Jun		60.594 295		40.067 434	57.25 197	42.726 336	23.25 208	9.287 340	60.96 20
	18	60.889 278	62.03 163	40.501 408	59.22	43.062	25.33 226	9.616	63.02 22
	28	61.167	60.40	40.909 274	61.53	43.379 200	27.59	9.927 386	05.24
Aug.	7	01.422	58.97	41.283 221	04.12	43.669	29.98 216	10.213	07.50
	17	61.649 102	57.79	41.614 284	06.94	43.920	32.44 247	10.467	09.93 22
	27	61.842 157	56.88 64	41.898 231	69.92 308	44.147 181	34.91 244	10.686	72.30 23
Sept.	6	61.999 120	56.24	42.129 177	73.00 312	44.328 141	37.35 236	10.866	74.61 22
	16	62.119 83	55.87 10	42.306 122	76.12 309	44.469 100	39.71 223	11.007	76.83
	26	28 62.202 46	55.77	42.428 68	79.21 300	44.569 60	41.94 207	11.109 63	78.91
Okt.	5	62 248	55.01	42.496 16	82.21 286	44.629 22	44.01 188	11.172 26	80.83
	15	62.262 14	56.26 35	42.512 35	85.07 265	44.651 = 12	45.89 164	11.198 8	82.54 14
	25	62.245	76.70	42.477 82	87.72 238	11.620	47.53 139	11.190	84.03 12
Nov.	4	62 202	E7 16	42.395 126	90.10 206	14.505	48.92	TT TET 39	
	14	6 05	78 00 //	42.269 165	92.16	/3	50.03 80	11.085	86.24 6
	24	62.137 83	ro 06	42.209 165	02.84		E0 82	10.994	86.63
Dez.	4	62.054 99 61.955 109	CO OT	42.104 <sub>200</sub> 41.904 <sub>230</sub>	93.84 <sub>126</sub> 95.10 <sub>80</sub>	44.424 44.304 138	51.31 48	10.882	87 20
			-				_ =		-
	14	61.846 117	60.76	41.674 252	95.90 31	44.166	51.46	10.752	87.37 2
	24 34	61.729 121	61.58 62.33 75	41.422 <sub>267</sub> 41.155	96.21	44.014 <sub>162</sub> 43.852	51.26 50.73 53	10.608	87.12 86.57
2000									
	l. Ort	58.545	78.86	36.896	61.22	40.144	21.54	6.769	58.51
	$t, tg \delta$	1.003	0.075	1.684	+1.355	1.198	+0.659	1.161	+0.590
	a'	+3.1	+19.9	+3.3	+19.8	+3.2	+19.8	+3.2	+19.8
Ъ,	6	0.00	- 0.12	+0.09	— o.15	+5.04	- o.15	+0.04	- 0.16

## Obere Kulmination Greenwich

Ta	or I	21) a Cas	siopeiae	22) β	Ceti	25) o Cass	siopeiae	24) 21 Ca	assiopeiae
	5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	oh 37 <sup>m</sup>	+56° 12′	oh 40 <sup>m</sup>	-18° 18′	oh 41 m	+47° 57′	oh 41 <sup>m</sup>	+74°39′
Jan.	0	6.704	49.06	35.024 134	62.37	23.461 <sub>226</sub>	38.69	41.75 72	58.66
0 ((11)	10	6.704 6.412 295	48.64	34.890	62.94 57	23.235 229	28.18	41.03 72	58.66
	20	6.117 282	47.71 140	34.757 127	62 27	23.006		40.30 69	58.04 120
	30	5.835 258	46.31 181	34.630 116	62.22	22.784 204	37·24 <sub>135</sub> <sub>35·89 <sub>170</sub></sub>	39.61 <sub>.64</sub>	56.84 175
Febr.	9	5.533 <sub>258</sub> 5.577 <sub>223</sub>	44.50 216	24 514	62 T2	22.580	34.19 199	38.97 <sub>56</sub>	55.09 222
2 0011	9			22	4/				
	19	5.354 175	42.34 242	34.415	62.65	22.403 140	32.20 219	38.41	52.87 260
2.1	29	5.179 116	39.92 257	34.338	61.90	22.263 94	30.01 231	37.90	50.27 286
März	10	5.063 49	37·35 <sub>261</sub>	34.289 16	60.89 126	22.169 39	27.70 231	37.05 17	47.41 302
	20	5.014 23	34.74 255	34.273 21	59.63	22.130	25.39 222	37.48	44.39 205
	30	5.037 99	32.19 238	34.294 62	58.12	22.151 83	23.17 205	37.46	41.34 295
Apr.	9	5.136	29.81	34.356	56.38 193	22.234 147	21.12	37.60 30	38.39 276
	19	5.311 2.16	27.69	34.460	54.45 210	22.381	19.35 TAA	37.90	35.63
	29	5.557 ava	25.90 137	34.607 187	52.35 222	22.589	17.91 105	30.34 57	33.18 206
Mai	9	5.869	24.53 92	34.794 225	50.12	22.853	16.86	38.91 <sub>60</sub>	31.12
	19	6.239 415	23.61 43	35.019 257	47.82 232	23.167 314	16.25 16	39.60 77	29.51 110
	29	6.654	23.18	35.276 283	45.50 230	23.522	16.09 30	4°-37 85	28.41
Juni	8	1 /.104	23.25 56	35.559	43.20	23.907 406	16.39 76	41.22 89	27.84 57
	18	7.576 480	23.81	35.860	41.00	24.313	17.15 110	42.11 90	27.83
	28	0.050 476	24.85	30.1/2	38.95 185	24.727	18.34 108	43.01 90	28.36 53
Juli	8	8.532 460	26-34 190	36.487 309	37.10 160	25.140 400	19.92	43.91 87	29.42 157
	18	8.002	28.24 226	36.796 294	35.50 130	25.540	21.86 225	44.78 83	30.99 203
	28		30.50 257	37.090 273		1 25.017	24.11	45.61 76	33.02 245
Aug.	7		33.07 282	37.363 245	22 22	26.265 311	26.60 269	46.37 67	35.47 281
	17	1 10.1/1	35.89 300	37.608 212	32.59 28	40.770 -60	29.29 282	47.04 59	28 28
	27	10.480 249	38.89 312	37.820	32.31	26.844 223	32.11 289	47.63 48	41.38 334
Sept.	6	10.729 193	42.01 318	37.995 138	32.39	27.067	35.00 291	48.11 36	44.72 351
	16	TO 022	45.19 317	38.133 98	22.80	27.241 126	37.91 286	48.47 25	48.23 360
	26	11.057 76		28.221	22.52	27.367 78	40.77 277	48.72	51.83 361
Okt.	5	11.133 20	ET 46	38.290 <sub>23</sub>	34.49 118	27.445 31	43.54 261	48.85	55.44
	15	11.153 33	54.43 297	38.313 10	35.67	27.476 13	46.15 241	48.86 -	58.99 342
	25	11.120	57.19 251	28 202	36.99 140	27 462	48.56 216	48.75	62.41 320
Nov.	4	TT.025 85	50.70	28 262	38.39	07 407 50	50.72 185	1 48.52	02+01
	14	10.902 177	61.89 182	38.198 88	39.80 138	27.313 129	52.57 150	48.18 44	68.51 252
	24	10.725 215	63.71	38.110	41.18	27.184 161	54.07 111	47.74 44 53	71.03 207
Dez.	4	10.510 248	65.10 92	38.006 118	42.45	27.023 187	55.18 68	47.21 62	73.10 156
	14	10.262	66.02	37.888 128	12.57	26.836 209	rr 86	46.59 68	74.66
	24	9.989 291	66.44	37.760	44 ET 9T	26.627 224	56.TO	45.91 72	75.65
	34	9.698	66.35	37.627	45.23	26.403	55.88	45.19	76.04 39
Mitt	l. Ort	5 250			1			38.82	37.83
	$\delta$ , tg $\delta$	5.259 1.798	31.14	34.703	56.25	22.221	22.90 +1.109	3.780	+3.646
	a'	+3.4	+1.494 +19.8	1.053	-0.331	1.493		- 3.760 - +4.0	+19.7
	b'	3'4	-19.0	+3.0	+19.7	+3.3	+19.7	1 4.0	- 0.18

T	ag	27) ζ An	dromedae	32) γ Ca	ıssiopeiae	33) μ An	dromedae	35) α S	Sculptoris
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl,
19	40	oh 44 <sup>m</sup>	+23°56′	o h 53 m	+60° 23′	oh 53 <sup>m</sup>	+38° 10′	o <sup>h</sup> 55 <sup>m</sup>	-29° 40
Jan.	0	9.990 141	36.57	5.92	50.43	25.981 178	40.24	43.240 160	63.09
	IO	9.849 143	25.84 13	5.92 5.58 34	ED 28 13	25.803 182	$39.72 \begin{array}{c} 5^{2} \\ 87 \end{array}$	43.080 160	62.61
	20		24.00	5.24 34	49.59 119	25.621 180	38.85	10.000	63.76
	30	9.567 139	22 70	4.90	48.40 166	25.441 170	37.65	12 765 133	63.55
Febr.	9	9.437 113	32.55 133	4.58 28	46.74 206	25.271 149	36.18 168	42.620 145	62.98 57
	19	9-324 88	27.22	4.30 22	44.68 237	25.122	34.50 183	12 102	62.05 126
	29	0.236	20.88	4.08 17	42.31 258	25 000	32.67 189	12 288	60.79 158
März	10	0.170	28 58 130	1 2.OT	39·73 <sub>268</sub>	24.016	30.78 187	12.212	59.21 185
	20	0.158	27.20	3.82	37.05 267	24.875	28.91	12 27T	57.36 211
	30	9.180 67	26.38 79	3.81 8	34.38 256	24.884 62	27.14 <sub>158</sub>	42.269	55.25 233
Apr.	9	9.247 114	25.50	3.89 16	31.82 234	24.946	25.56 132	10 210	52.92 250
	19	9.361 160	25.07	4.05 24	29.48 204	25.063	24.24 101	12 207	50.42 262
	29	9.521 203	24.87	4.29 32	27.44 166	25.234 222	02.02	12 520 33	47.80 269
Mai	9	9.724 242	25.00	4.61 39	12578	25.456 266	23.23 65	12 708	AC TT
	19	9.966 275	25.47 <sub>80</sub>	5.00 44	24.55 75	25.722	22.32	42.927 257	42.40 265
	29	10.241 301	26.27 112	5.44 49	22.80	26.027 335	22.47	43.184 287	39.75 253
Juni	8	10.542 318	27.39 141	5.03	22 55	26.362 335 355	22.02	43.471 310	37-22 236
	18		1 2 4 4 5	6.44 53	23.80	26.717 366	23.95 129	43.781 326	34.86 212
	28	TT 186 340	30.45 186	6.97 53	24.55 <sub>122</sub>	27.083 367	25.24 <sub>163</sub>	44.107 332	32.74 182
Juli	8	11.512 326	32.31 201	7.50 52	25.77 <sub>166</sub>	27.450 359	26.87	44.439 329	30.92
	18	310		8.02					
	28	11.830 <sub>302</sub> 12.132 <sub>278</sub>	34·32 <sub>211</sub> 36·43 <sub>216</sub>	8.02 8.51 8.65 8.65	27.43 <sub>206</sub> 29.49 <sub>241</sub>	27.809 341 28.150 318	28.77	44.768 317 45.085 298	29.45 109 28.36 68
Aug.	7		38.59 216	8.97 41	21.00	28.468 287	30.90 232	45.383 272	27 68
	17	12.660 217	40.75 210	9.38 36	31.90 270 34.60 293	28.755 <sub>251</sub>	33.22 244 35.66 251	45.655 238	27 42
	27	12.877 181	42.85 201	9.74 30	37·53 <sub>310</sub>	29.006	38.17 253	45.893 201	27.61 60
Sept.	6	13.058		10.04 25		29.218		46.094 160	28.21
ocpo.	16	13.050 144	44.86	10.29 18	40.63 320	20.280	40.70 250	46.254 118	20.18 97
	26	13.202 106	46.75 173 48.48 154	10.47 11	43.83 325 47.08 222	29.389 <sub>130</sub> <sub>29.519 80</sub>	43.20 242 45.62 229	16 272	30.40
Okt.	5	13.378 70	50 00 154	TO 58	50.20	29.519 89	47.91 <sub>213</sub>	16 117	22.08 159
	15	13.413 35	51.35 112	10.63	53.43 298	29.657 49	50.04 193	46.482	33.88 192
	25	12.416	50.45	10.62	i -	29.668		46.478	35.80 196
Nov.	4	T2-200	F0 06	10.55 7	56.41 59.16 67.67	20.642	51.97 <sub>169</sub>	46.428	37.76 192
-1011	14	TO 227 33	EA OT	10.43 18	61.61 211	20 596	53.66 <sub>142</sub> 55.08 <sub>113</sub>	.6 .60	39.68 181
	24	T2.260	EA AT	10.25 24	63.72 169	29.500 88	FO.21 I	46.272 <sub>118</sub>	41.49 161
Dez.	4	13.163 97	54.56	10.01	65.41 122	29.383	57.00 44	46.154 136	43.10
	14	13.048 128	54.46	•	66 62	29.245		46.018	44-47 107
	24	12,920 138	54.12	9·74 <sub>30</sub> 9·44 <sub>34</sub>	65 05	29.086 173	57.52	45.869 157	45.54 73
	34	12-782	53.53	9.10	67.54	28.913	57.22	45.712	46.27
Mittl	_	9.163	28.09	4.11	32.36	24.857	27.68	42.963	52.80
sec 8.			+0.444	2.024	+1.760		+0.786	1.151	-0.570
a,		+3.2	+19.7	+3.6	+19.5	+3.3	+19.5	+2.9	+19.5
ъ,		+0.03	- 0.19	-+0.II	- 0.23	3·3   +0.05	- 0.23	-0.04	- 0.24

Ta		36) ε P	iscium	38) β Pho	penicis m	42) β And	lromedae	45) v	Piscium
1.6	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	oh 59 <sup>m</sup>	+7° 34′	Ih 3m	-47° 1′	1h 6m	+35° 18′	1 <sub>p</sub> 16 <sub>m</sub>	+26° 56′
Jan.	0	50.282	5.33 74	24.638 236	97.48	23.036 166	21.82	10.803 143	65.36
o o n	10	50.159 128	4.50	24.402 235	07.80	22.870	21 26	10.660	64.85
	20	50.031 127	282	24.167 235	07.62	22.697 175	20.57 79	10.507 156	64 10 /3
		49.904 121	3.06 76	23.940 211	96.95	22.522 167	10.50	10.357 156	63.15 112
Febr.	30	49.904 121	2 22 /3	23.940 211	05.81	22.522 167	19.50	10.351 151	62.02
1 001.	9	49.783 108	2.33 67	23.729 189	95.81 159	22.355 151	18.17 153	140	120
	19	49.675 89	1.66	23.540	94.22	22.204 127	16.64 167	10.060	60.76
	29	49.586 64	I.10 43	23.381	02.23	22.077	14.97	9.941	59.44 124
März	IO	49.522 31	0.67 26	23.258 80	89.89 264	21.984 52	13.25	9.851 55	58.10 128
	20	49.491 6	0.41 5	23.178 31	87.25	21.932 5	11.54 162	9.790 13	56.82 116
	30	49.497 47	0.36 18	23.147 = 22	84.36 308	$21.927 \frac{1}{46}$	9.92	9.783 34	55.66 98
Apr.	9	49.544	0.54	23.169 78	81.28 320	21.973 00	8.48	9.817 82	54.68
	19	49.634 133	0.97 70	23.247	10.00	22.072	7.28 91	9.899 132	52.02
	29	49.767 175	1.67 06	23.380 188	74.83	22.224 202	6.27	10.031 179	53.46 17
Mai	9	49.942 212	2.63 120	23.568	71.59 21	22.427 2.0	5.80 57	10.210 222	F2 20
	19	50.154 246	3.83	23.808 287	68.44 298	22.675 287	5.59 17	10.432 261	53.46 49
	29	50.400 272	5.25 161	24.095 327	65.46 275	22.962 318	5.76	10.693 291	
Juni	8	50.672 292	6.86	24.422 358	62.71 245	23.280 341	6.2T	TO 084	53.95 81
V 11111	18	50.064	8.62 186	24.780 358 24.780 380	60.26		7 22	11.298 314	H= 00
	28	50.964 304 51.268 307	10.48 191		58.17	23.075	8.47	11.626 328	-m -n6
Juli	8	51.200 307	12 20	25 552 394	56.50 120	23.975 358	8.47 155 10.02 181	11.000 334	58.88 181
	U	51.575 303	12.39 191	373	120	24·333 352		11.960 334	
	18	51.878 290	14.30 186	25.945 383	55.30	24.685 339	11.83 203	12.291 320	60.69 194
	28	52.108 271	16.16	20.328	54.59 19	25.024 217	13.86	12.011	02.03
Aug.	7	52.439	17.92 162	20.091	54.40 33	25.341	16.04	1244112 200	04.07 208
	17	52.080 218	19.54	21.024 205	54.73 84	25.630	18.34	13.189 248	66.75
	27	52.904 185	20.98 124	27.319 249	55.57 131	25.886 221	20.70 236	13.437 216	68.82 202
Sept.	6	53.089 151	22.22	27.568 199	56.88	26.107 182	23.06	13.653 180	70.84 193
	16	53.240 116	23.24 79	27.767 145	58.01	26.289	25.38	13.833 144	72.77 181
	26	53.356 82	24.03 56	27.912 90	00.70	26.432	27.63 212	13.977 109	74.58 166
Okt.	6	53,438	24.59 34	28.002 36	03.07	826.536 65	29.75 196	14.086 73	76.24 149
	15	53.488 19	24.93	28.038	65.62 263	26.601 28	31.71 178	14.159 40	77.73 130
	25	52 507	25.07	28 227	68.25 260	26.629 6	33-49 155	14.199 8	79.03 109
Nov.	4	E2.407	25.02	27.955 110	70.85 248	26 622	35.04 131	T4.207	80.12 87
	14	52 462 33	21		73.33 225	26.584 68	36.35 103	T4 T8=	80.99 63
	24	52 ADE 3/	24.45	27.698 178	75.58 193	20 510		TA 125	
Dez.	4	52,228	22.08 4/	27.520 203	77.51 154	26.420	28.TT /3	T4.050	82.02 40
		93	30			1-3	20	99	- 3
	14	53-233 109	23.40 65	27.317 221	79.05	26.297 143	38.53 8	13.960 120	82.17 11
	24 34	53.124 119	22.75 72	27.096 232 26.864	80.16 80.79	26.154 <sub>160</sub>	38.61 38.36 <sup>25</sup>	13.840 137	81.71 35
74.	_	55.005	22.03	20.004	00.79	25.994 ————	30.30	13.703	02.71
Mittl	Ort.	49.560	3.20	24.571	82.37	21.871	10.72	9.719	57-34
sec 8		1.009	+0.133	1.467	-1.074	1.225	+o.7o8	1.122	-+0.508
<i>a</i> ,		+3.1	+19.4	+2.7	+19.3	+3.3	+19.2	+3.3	+18.9
<i>b</i> ,	6	+0.01	- 0.26	-0.07		+0.05	- o.29	+0.03	- 0.33

Ta	10	47) 9	Ceti	48) δ Ca	ssiopeiae	50) η P	iscium	51) 40 C	assiopeiae
	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	Ih 2Im	-8° 29'	1 <sup>h</sup> 21 <sup>m</sup>	+59° 55′	1 <sup>h</sup> 28 <sup>m</sup>	+15° 2′	1 <sup>h</sup> 33 <sup>m</sup>	+72° 43'
Jan.	0	2.051 126	37.22 80	54.385 321	43.57 18	17.073 125	17.09 62	44.22 60	84.57 65
	10	1.925	38.02 63	54.004	$43.75 \frac{13}{34}$	16.948	16.47	43.62 63	85.22
	20	1.792	38.65 46	53.725 040	43.41 86	16.812	15.75 80	42.99 64	85.27 54
	30	1.656	39.11 26	53.382 331	42.55	10.072	14.95 85	42.35 62	84.73
Febr.	9	1.524 122	39.37 5	53.051 304	41.22 176	16.532	14.10 85	41.72 58	83.62
	19	1.402 106	39.42	52.747 263	39.46	16.401	13.25 83	41.14	81.98 210
	<b>2</b> 9	1.296 82	39.25	52.484 206	37.34 237	16.287 or	12.42 77	40.63	79.88 246
März	10	1.213 54	38.85 64	52.278	34.97 254	16.196	11.65 65	40.22	77.42
	20	1.159 18	38.21 80	52.139 6r	32.43 260	16.137 22	11.00 49	39.92 17	74.09 288
	30	1.141 =	37.32 112	52.078 = 23	29.83 255	16.115 =	10.51 29	39.75 3	71.81 291
Apr.	9	1.162 63	36.20	52.101 108	27.28	16.135 64	10.22	39.72	68.90 284
	19	1.225	34.84 157	52.209 ,02	24.88	16.199	10.17	39.83	00.00
	29	1.332 150	33.27 176	52.402	22.73 .04	16.309	10.36	40.08 38 40.46	03.40
Mai	9	I.482	31.51 102	52.075	20.89	10.464	10.83 74	40.46	01.03
	19	1.671 225	29.59 204	53.020 408	19.44	16.661	11.57 99	40.96 61	59.01 160
	29	1.896 256	27.55 210	53.428 458	18.43	16.895 265	12.56	41.57 70	57.41 113
Juni	8	2.152	25.45 211	53.000 405	17.88	17.160	13.80	42.27 76	50.28 62
	18	1 2.431	23.34 207	54.381 520	17.81 -	17.449	15.24 .6.	43.03 <sub>81</sub>	55.65 11
	28	2./20 202	21.27	54.901 <sub>529</sub>	18.22	1 1/1/53 ara	16.85	43.84 82	55.54 40
Juli	8	3.029 303	19.30 183	55.43° <sub>526</sub>	19.09 132	18.065 312	18.59 182	44.67 83	55.94 91
	18	3.332 295	17.47 162	55.956	20.41	18.377	20.41 184	45.50 82	56.85 139
	28	3.627 280	15.85	1 50.400	22.13 209	18.081	22.25	46.32	58.24 .0.
Aug.	7	3.907 250	14.48	50.949	24.22	18.970 260	24.07	47.10	00.07
	17	4.166	13.38	31.390 402	26.62	19.238	25.83	41.03 66	02.30
	27	4.399 202	12.59 48	57.799 353	29.29 287	19.480 213	27.48	48.49 59	04.89 289
Sept.	6	4.601 169	12.11 16	58.152 296	32.16 301	19.693 181	29.00 134	49.08	67.78 312
	16	4.770 126	11.95	58.448	35.17	19.874	30.34 116	49.58	70.90 330
	<b>2</b> 6	1 4.005	12.09 42	58.686	38.27	20.021	31.50 97	49.99 31	74.20
Okt.	6	5.006 66	12.51 66	58.864 115	41.39 208	20.135 82	32.47 76	,,50.30	77.61 345
	15	5.072	13-17 85	58.979 54	44.47 298	20.217 50	33.23 57	350.51	81.06
	25	5.107	14.02	59.033 7	47.45 280	20.267 21	33.80 38	50.61	84.47 330
Nov.	4	5.112	15.03	59.026	50.25	20.288	34.18	50.59	87.77 311 90.88 284
	14	5.089 48	16.13	58.959 125	52.81	20.280	34.37 3	50.47	90.88 284
	24	5.041 70	17.27	1 30.034 180	55.00 tot	20.240 58	34.40	50.25	248
Dez.	4	4.971 89	18.41 108	58.654 230	56.99 148	20.188 81	34.26 28	49.92 43	96.20 206
	14	4.882	19.49 100	58.424 273	58.47 102	20.107 101	33.98	49.49 51	98.26
	24	4.775	20.49 88	58.151 300	59.49 51	20.006	33.56	48.98 57	99.82
	34	4.655	21.37	57.842	60.00	19.889	33.01	48.41 57	100.84
	l. Ort	1.380	32.85	52.249	27.10	16.089	13.62	40.53	66.76
	, tg δ	1.011	-0.150	1.995	+1.727	1.036	+0.269	3.369	+3.218
a,		+3.0	+18.8	+3.9	+18.8	+3.2	+18.6	+4.8	+18.4
b,	b'	-0.01	— 0.35	+0.11	— 0.35	+0.02	<ul><li>— 0.38</li></ul>	+0.20	- 0.40

T	i or	52) 51 An	dromedae	54) a E	Cridani	55) 43 Ca	ssiopeiae	57) φ	Persei
21	*5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	Ih 34m	+48° 19′	1 <sup>h</sup> 35 <sup>m</sup>	-57° 31'	1 <sup>h</sup> 37 <sup>m</sup>	67° 44'	1 <sup>h</sup> 39 <sup>m</sup>	+50° 23'
Jan.	0	19.532 216	43.35	29.110	105.66	54.97 45	42.90	54.994 226	27.79
	10	19.316	12.20		106.20	54·52 48	12.17	54.768 246	27.94 29
	20	19.083	12 OT		106.17	54.04 48	12 18	54.522 255	1 27 NE
	30	18.843 238	12 20	28.100 323	105.58 113	53.56	12 02	54.267 <sub>253</sub>	26.02 /3
Febr.	9	18.605 223	41.00	$27.777 \frac{323}{301}$	104.45 163	53.56 48 53.08 44	41.81 160	54.014 239	25 78 114
			*54	301		35 - 44	1		,
	19	18.382	39.46 181	27.476 268	102.82 209	52.64 <sub>39</sub>	40.21	53.775 213	24.27 180
	29	18.185	37.65 201	27.208 226	100.73	52.25 22	38.18	53.562	22.47 202
März	10	18.027	35.64 212	26.982 <sub>174</sub>	1 05.23 6	51.93 24	35.81 262	53.300	20.45 216
	20	17.917	33.52 215	20.808	1 05 28 1	51.69	33.19 276	53.264 66	18.20
	30	17.863	31.37 207	26.691 <sub>53</sub>	92.26 334	51.56 3	30.43 278	53.198 1	16.08 216
Apr.	9	17.872 7,	29.30	26.638	88.92 348	51.53	27.65 269	53.197 67	13.92 201
1	19	17.946	27.38 168	26.654 86	85.44 354	51.62 20	24.96 251	53.264 136	11.91 180
	29	18.086	25.70 138	26.740	81.00	51.82 30	22.45	53.400 202	10.11
Mai	9	18.289 261	24.32 102	26.896	81.90 352 78.38 343	52.12 41	20.22	Fa 600	I X DT
	19	18 550	22.30	27.120 288	74.95 343	5 <sup>2</sup> ·53 <sub>49</sub>	18.34 146	53.866 264	7 46 115
	19	18.550 313	23.30 63	288	14.93 326		146	317	//
	29	18.863	22.67 22	27.408 37.752	71.69 301 68.68 268	53.02 56 53.58 61	16.88	54.183 <sub>363</sub>	6.69 36
Juni	8	19.210 .0	22.45 20		68.68 268	53.58 <sub>61</sub>	15.87 52	54.540 207	$6.33 \frac{3}{7}$
	18	14.005	22.65	20.143 420	00.00	54.19 6	15.35 2	54.94.5	6.40
	28	20.014	23.26		03.71 a	54.84 67	15.33 48	55.363	6.90 90
Juli	8	20.433 419	24.27 138	29.026 454	61.87	55·51 <sub>67</sub>	15.81 96	55.796 435	7.80
	18	20.852 410	25.65 170	29.493 467	60.70	56.18 66	16.77	56.231 426	9.07 163
	28	21.262 391	27·35 <sub>199</sub>	29.960 454	59.74 23	56.84 63	18.18 183	56.657 407	10.70
Aug.	7	21.653 364	29.34 223	30.414 428	FO ET	57.47 <sub>60</sub>	20.01	57.064 382	12.63 218
b.	17	22.017	27.54 223	20 X 4 2	59.86	58.07	22.22		
	27	22.017 331 22.348 293	31.57 241	21 222	60.77	58.07 58.61 <sub>48</sub>	24.76 <sub>281</sub>	57.705 349	239
	21	22.340 293	33.98 255	31.232 343	60.77			57.795 310	~33
Sept.	6	22.641	36.53 263	31.575 286	62.21 192	59.09 <sub>42</sub>	27.57 303	58.105 268	19.75 266
	16	22.893	39.10 -66	31.861	04.13	59.51 24	30.00 210	58.373	22.41
	<b>2</b> 6	23.100 .60	41.82	32.083	00.47	59.05 26	33.79 228	58.596	25.11
Okt.	6	23.262	44.40 257	32.238 84	09.13	60.11	37.07	58.773	27.81 265
	15*)	23.379 71	47.03 245	32.322	72.02 300	60.29 10	40.37 325	58.902 82	30.46 254
	25	02.450	49.48 228	32.337		60.39 2	12.62	58.984 24	33.00 239
Nov.	4	22.476	49.40 <sub>228</sub>	32.331 53	75.02 300	60.41	43.62 46.76 294	59.018 34	25.20
-1011		23.470 18	51.76 205	32.284 116	78.02 288	60.34 7	40.10 204	59.010	35.39 218
	14	23.458 61	53.81 178	32.168	80.90 265	60.34	49.70 267	59.005 58	37.57 192
Dez.	24	23.397 <sub>IOI</sub>	55.59 149	31.994 223	83.55 231	60.19 23	52.37 233	58.947 102	39.49 160
202.	4	23.296	57.08 113	31.771 265	85.86	59.96 30	54.70 192	58.845 143	41.09 126
	14	23.156	58.21 73	31.506 298	87.76	59.66	56.62	58.702 181	42.35 86
	24	22.981 203	58.94 73	31.208 321	89.17 88	59.29 37	58.07 92	58.521 213	43.21
	34	22.778	59.26	30.887	90.05	58.87	58.99	58.308	43.64
Mitt	l. Ort	7 P 0 - 0	22.76	20 020	Qn 60	#T 06	26.04	E2 T45	T 4 4 4
880 A	, tg 8	17.809	30.16	28.938	87.62	51.96	26.04	53.147	14.44
a,		1.504	+1.123	1.863	-1.572	2.640	+2.443	1.568	+1.208
Luy		+3.7	-+18.4	+2.2	+18.3	+4.4	+18.2	+3.8	÷18.2
Ъ,	b'	-⊢0.07	— o.4o	-0.10	- 0.40	+0.15	- 0.41	0.07	- 0.42

<sup>\*)</sup> Bei Stern 55) und 57) lies Okt. 16.

Ta	o	59) τ (	Ceti 1)	60) o P	iscium	61) & Scu	ılptoris	62) <b>ζ</b>	Ceti
10	5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	I <sup>h</sup> 4I <sup>m</sup>	-16° 14′	I <sup>h</sup> 42 <sup>m</sup>	+8° 51'	Ih 42m	-25° 20'	1 <sup>h</sup> 48 <sup>m</sup>	-10° 37
Jan.	0	17.483	77.97 84	14.274 119	24.18	50.784 149	76.97 80	30.642	56.78
	IO	17.346	78.8T	14.155	22 57	50.635 160	77.86	30.517 136	57.67
	20	17.200	70-40	14.024 139	22.8T	50.475 164	78 42 3/	30.381	58-37
	30	1 17.040	70 72 33	13.885	22 11 70	50.311 163	78.65	30.237 146	E8 86 43
Febr.	9	16.898	70.78	13.745	27.42 09	50.148	78.5T	20 00T	FO T2
	9		19.10 24		21.42 63		79	*39	_
	19	16.755 127	79.54 52	13.611	20.79 56	49.993 140	78.02 84	29.952 127	59.16
	29	16.628 106	79.02 80	13.490 99	20.23 46	49.853 117	77.18 116	29.825	58.95
März	10	16.522	78.22 107	13.391 70	19.77	49.736 88	76.02 148	29.718	58.49
	20	16.444 43	77.15	13.321 35	19.46	49.648	74.54	29.638 46	57.77
	30	16.401 3	75.81 159	13.286	19.33	49.596 11	72.77 202	29.592 8	56.81
Apr.	9	16.398	74.22 182	13.291 48	19.41	49.585	70.75 224	29.584	55.60 145
•	19	76 428	72.40 201	T2.220 40	10.71	49.619 80	168.5I	20.618	54.15
	29	16 522	70.30	13.433 138	20.25	49.699 126	66.08 256	29.697 79	52.49 185
Mai	9	T6 65T	68.22	13.571 180	21.04	49.825	03.52		50.64 201
	19	16.822	65.92 236	13.751 218	22.06	49.997 212	60.88 266	29.986 204	48.63
						1			(
	29	17.032 243	63.56	13.969 250	23.31 143	50.209 248	58.22 261	30.190 238	46.51 217
Juni	8	17.275	01.10	14.219 276	24.74 ,60	50.457 277	55.61 250	30.428 265	44.34
	18	17.545 289	50.05 222	14.495 293	26.34	50.734 200	53.11 233	30.693 286	42.15
_	28	17.834	50.02	14.788	28.00 ,_0	51.034	50.78	30.979 298	40.02
Juli	8	18.135 304	54.56 184	15.092 304	29.84 181	51.347 319	48.68	31.277 302	37.99 187
	18	18.439 300	52.72	15.398 301	31.65 177	51.666	46.88	31.579 300	36.12
	28	18.739 288	51.15 126	15.099 200	33.42	51.982 305	45.43 107	31.879 289	34.47
Aug.	7	19.027	49.89 92	15.087	35.12	52.287 287	44.36 66	32.168 272	33.08
	17	19.296 244	48.07	16.257 247	20.70	52.574 262	43.70 23	32.440 250	31.00
	27	19.540 216	48.43	16.504 219	38.12	52.836 232	$43.47 \frac{23}{20}$	32.690 223	31.22
Sept.	6	19.756 184	18.26	16.723 189		53.068 199	43.67 62	32.913 192	20.70
оори.	16	19.730 184	48.46	16.912	39·35 103 40·38 81	53.267 163	44.29 100	33.105 161	30.70
	26	20.089	40.00	17.069 126	47.70	52 420	45 20	33.266	30.94
Okt.	6	1 20 202	40.85	17.195	41.77 58	53.430 <sub>125</sub> 53.555 <sub>87</sub>	45.29 133	22 202	27 48 54
01.0.	16	20.282	50.06	17.193 94	12 14 3/	53.555 87 53.642 50	46.62 160 48.22 181	22 487 27	22.28
				17.289 63	42.14 17				102
	25	20.328 13	52.28	17.352	42.31	53.692	50.03 193	33.549 31	33.30
Nov.	4	20.341 17	53.73 +#2	17.385	42.29 17	53.707 18	51.96 196	33.580 1	34.48
	14	20.324 44	55.20	17.390	42.12	53.689	53.92 193	33.581 =	35.75 132
	24	20.280 70	50.79 146	17.368	41.81 42	53.640	55.85 181	33·554 <sub>52</sub>	37.07 131
Dez.	4	20.210 93	58.25	17.321 70	41.39 51	53.563	57.66 162	33.502 76	38.38
	14	20.117 112	59.60	17.251	40.88	53.462 123	59.28 138	33.426	39.62
	24	20.005 129	60.78	17.159 110	40.20	53.339 141	60.66	33.329 116	40.75
	34	19.876	61.76	17.049	39.65	53.198	61.75	33.213	41.74
Mittl	. Ort	16.790	70.15	13.288	23.47	50.150	66.41	29.832	50.67
sec δ		1.042	-0.292		-+0.156	1.107	-0.474	1.018	-0.188
a,		+2.9	+18.1		+18.1	-	+18.1	+3.0	+17.8
~,	b'	, ~-9		. 5	20.2			. 5.0	-,

<sup>1)</sup> Die jährliche Parallaxe (0."315) ist bereits berücksichtigt.

Ta	1.0*	64) a Ti	rianguli	63) € Cas	siopeiae	65) ξ F	iscium	67) \( \psi \) P	hoenicis
10	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	1 <sup>h</sup> 49 <sup>m</sup>	+29°17′	Ih 50m	+63°22′	1 <sup>h</sup> 50 <sup>m</sup>	+2° 53′	ih 5im	-46° 35
Jan.	0	40.578 140	21.59 28	5.92	47.75 6r	27.738 117	29.99 75	15.005 235	61.47 8
	10	40.438 157	21.21	5.92 36 5.56 38 5.18 40	18.26	27.621 130	20.24	14.770 247	62.24
	20	40.281 167	20.70	5.18	18.12	27.491 139	28 52	14.523 250	62.71
	30	40.114 169	20.04	4.78 39	47.06	27.352	0- "T	14.273	62.56
Febr.	9	39.945 163	19.09 112	4.39 38	46.97	27.211	27.22	14.026	GT OT
	9						13		
	19	39.782 148	17.97	4.01	45.51 187	27.075 125	26.88	13.791 213	60.78 158
	29	39.634 124	16.73	3.0/ 28	43.64	26.950	26.55	13.578 186	59.20 200
März	10	39.510 90	15.43	3.39 22	41.43 245	26.846	26.38	13.393	57.20 23
	20	39.420 49	14.13	3.17 12	38.98	26.769	26.38	13.246	54.84 26
	30	39.371 3	12.89 111	3.04 4	36.39 263	26.725 5	26.59 42	13.144 51	52.17 29
Apr.	9	39.368 47	TT.78	3.00 6	33.76 256	26.720 28	27.01	13.093	49.24 313
	19	20.415	то.85	3.06 6	31.20	26 758	07 66	13.097 61	46.11 326
	29	39.514 149	TO.T5	3.21 25	28.82 212	26 84T	28.54	13.158	42.85 331
Mai	9	39.663 197	0.72	3.46 33	26.70 180	26.068	29.65	13.277	39.54 330
	19	39.860 239	0.50	3.79 41	24.90	27.137 <sub>207</sub>	30.97	13.452 228	36.24 330
			1 "7				i		
7	29	40.099 276	9.78 49	4.20 47	23.49 98	27.344 241	32.48 166	13.680 276	33.04 303
Juni	8	40.375 304	10.27 79	4.0/	22.51 51	27.585 267	34.14 178	13.956 316	30.01 280
	18	40.079	11.06	5.19 ==	22.00 4	27.852 287	35.92 184	14.2/2 348	27.21 248
T. 12	28	41.003 226	12.14	5.14 =0	21.96 43	28.139 200	37.76 186	14.620 370	24.73 200
Juli	8	41.339 339	13.46	6.32 58	22.39 89	28.437 302	39.62 182	14.990 370	22.64 166
	18	41.678	15.00	6.90 <sub>58</sub> 7.48 <sub>56</sub>	23.28	28.739 298	41.44	15,372 0	20.98
	28	42.012 334	16.71 182	7.48	24.00	29.037 288	43.18 161	15.756 375	19.51 6
Aug.	7	42-355	18.53	0.04	20.32	29.325	44.79 143		19.16
	17	42.635 277	20.44	0.57 .0	28.41 239	29.596	46.22	16,488	19.05 44
	27	42.912 249	22.38 193	9.05 44	30.80 265	29.844 223	47.43 08	16.817 294	19.49 96
Sept.	6			0.40	1		48.41 74		
ocpu.	16	43.161 217	24.31 <sub>188</sub>	9.49 38	33.45 286	30.067	/ +	17.111 251	20.45 145
	26	43.378 183	26.19 179	9.87 38	36.31 301	30.260 163	49.15 48	17.362 205	21.90 189
Okt.	6	43.561 149	27.98 169	10.20 33	39.32 309	30.423	49.63	17.567 154	23.79 225
- 100	16	43.710 115	29.67	10.45 19	42.41 312	30.554 100	49.85 0	17.721 101 17.822	26.04 254
	10	43.825 81	31.22 139	10.64	45.53 308	30.654 69	49.05 21	19 49	28.58 272
	25	43,006	32.61	10.77 5	48.61 297	30.723 39	49.64 39	17.871	31.30 278
Nov.	4	43.953 47	33.82	10.82	51.58	30.762	49.25 53	17.869	34.08 275
	14	43.967 18	34.85 82	10.80	54.38 255	30.773 = 17	48.72 64	17.819 05	36.83 260
10	24	43,040	35.67 61	10.71 9	56.93 224	30.756 42	48.08 71	17.724	39.43 226
Dez.	4	43.900 77	36.28 37	10.55	59.17 187	30.714 66	47.37 75	17.589 170	41.79 203
	14	43.823 105	26.65	10.33 28	61.04 142	20.648	16.62	17.419 199	43.82 162
	24	43.718 129	26.78	10.55 28	1 D2.4D	20 560	15.85 //	17.220 223	45.44 117
	34	43.710 129	36.66	10.05 33	63.39	30.453	45.09 76	16.997	46.61
Mitt	. Ort								1
800 %	tg δ	39.238	14.58	3.20	32.40	26.776	31.66	14.523	45.20
a,	a'	1.147	+0.561	2.232	+1.995	1.001	0.051	1.455	-1.057
ъ,		+3.4	+17.8	+4.3	+17.8	+3.1	+17.8	+2.4	+17.7 - 0.47
.0.	U	+0.03	— 0.46	⊣-0.12	- 0.46	0.00	— o.46	-o.o6	- 0 17

Ta	ເອ	66) ß A	rietis	68) χ E	Fridani	72) a	Hydri	71) v	Ceti
	· ·	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
194	40	ıı 51 m	+20° 30′	1 <sup>h</sup> 53 <sup>m</sup>	-51° 53′	1 <sup>h</sup> 56 <sup>m</sup>	-61° 51′	1 <sup>h</sup> 57 <sup>m</sup>	-21° 21'
Jan.	0	20.395 126	60.13	37.913 273	102.26	53.12	59.38	11.397	73.83
	10	20.260	50 67	37.640 284	102.00	52.73 <sub>41</sub>	60.14	11.258	7482 99
	20	20.128	50.07	37.356 289	TO2.20	52.32 41	60.3T -	11.106 160	75.51
	30	19.978	rs 22 /T	37.067 284	TO3.T5	51.91 40	50 00 41	10.946	75.88
Febr.	9	19.824	57.49 <sub>92</sub>	36.783 269	102.38 77	51.51 38	58.92 <sub>151</sub>	10.785	$75.93 \frac{5}{28}$
	19	19.675	56.57 96	36.514 246	101.10	51.13 35	57.41 199	10.628	75.65 60
	29	19.540 113	55.61	36.268	99.35	50.78	55.42	10.483	75.05 93
März	10	19.427 83	54.66 88	36.055	97.18 254	50.40 21	52.98 <sub>281</sub>	10.359 97	74.12
	20	19.344 46	53.78 78	35.884 122	94.04 286	50.24	50.17 212	10.262 63	72.89
	30	19.298 4	53.00 6r	35.762 67	91.78 311	50.05 12	47.05 336	10.199 24	71.38
Apr.	9	19.294 43	52.39 42	35.695 6	88.67	49.93 4	43.69 352	10.175 20	69.60
	19	19.337 oi	51.97 18	35.689 56		49.89 -	40.17	10.195 66	07.50
	29	19.428 138	51.79 8	35.745 120	01.90	49.93	30.50	10.261	05-37 228
Mai	9	19.566	51.87 35	35.865 183	70.00 241	50.06	.52.95 000	10.373 456	02.00
	19	19.750 224	52.22 62	36.048 240	75.09 330	50.26 27	29.40 339	10.529 198	60.50 253
	29	19.974 258	52.84 89	36.288	71.79 311	50.53 34	26.01 315	10.727 234	57.97 253
Juni	8	20.232 286	53.73	36.581 338	1 00.00 281	50.87 40	22.00 _0.	10.961 265	55.44 247
	18	20.518 305	54.86	30.919 274	05.84 240	51.27 45	20.02	11.226 288	52.97 222
T 1:	28	20.023	50.20	37.293 400	63.35 209	51.72	17.57 200	11.514 303	50.04
Juli	8	21.140 320	57.72 165	37.693 416	61.26 162	52.21 51	15.57 150	11.817 311	48.50 188
	18	21.460 316	59.37	38.109 419	59.64	52.72 51	14.07	12.128 310	46.62 158
	28	21.770	01.110	38.528	58.53 56	53.23 52	13.12	12.430 301	45.04
Aug.	7	22.080 286	02.80	38.939 202	57.97 0	53.75 49	12.75	12.739 286	43.82 84
	17	22.366 263	04.00	39.331 <sub>262</sub>	57.97 56	54.24 45	12.97 81	13.025 264	42.98
	27	22.629 236	00.38 163	39.694 325	58.53 110	54.69 41	13.78	13.289 237	42-54
Sept.		22.865 206	68.01	40.019 279	59.63 161	55.10 35	15.15 188	13.526 207	42.53
	16	23.071	100,53	40.298 227	61.24 206	55.45 20	17.03 234	13.733 172	42.92
01.1	26	23.240	70.91 121	40.525 170	63.30 242	55·74 <sub>21</sub>	19.37 270	13.905 138	43.69
Okt.	6	23.300 110	72.12	40.695 111	65.72 270	55.95 13	22.07 296	14.043 103	44.80
	16	23.498 77	73.17 87	40.806	68.42 287		25.03 311	14.146 67	46.19 162
	25	23.575 47	74.04 69	40.858	71.29 293	56.13 3	28.14 315	14.213 32	47.81
Nov.	4	23.622 16	74.73	40.851 62	74.22 287	50.10	31.29 306	14.245 1	49.50 18
	14	23.638	75.24	40.789 113	77.09 271	55.99 78	34.35 285	14.246 30	51.42 18:
_	24	23.025	75.57 16	40.676	79.80	55.81	37.20 253	14.210	55.25 17
Dez.	4	23.584 68	75.73	40.517 199	82.24 207	55.57 29	39.73 213	14.157 85	55.00 16
	14	23.516 93	75.72 19	40.318 233	84.31 164	55.28 34	41.86 164	14.072 109	56.61
	24	23.423	75.53 35	40.085 258	85.95 115	54.94 28	43.50 110	13.963 128	58.01
	34	23.308	75.18	39.827	87.10	54.56	44.60	13.835	59.17
	l. Ort	19.196	55.97	37-470	84.87	52.78	40.32	10.636	64.05
	$\delta$ , tg $\delta$	1.068	+0.374	1.621	-1.276	2.121	-1.870	1.074	-0.391
	a'	+3.3	+17.7	+2.3	+17.6	+1.9	+17.5	+2.8	+17.5
Ъ,	b'	+0.02	— 0.47	-0.07	<b>- 0.4</b> 8	-0.11	— <b>0.</b> 49	-0.02	- 0.49

Ta	ag	70) 50 Ca	issiopeiae	73) Y Andre	omedae $pr$	74) α A	Arietis	75) β Tr	ianguli
	9	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	1 <sup>h</sup> 58 <sup>m</sup>	+72° 7′	2 <sup>h</sup> 0 <sup>m</sup>	+42° 2′	2 <sup>h</sup> 3 <sup>m</sup>	+23° 10′	2 <sup>h</sup> 5 <sup>m</sup>	+34°42′
Jan.	0	19.92 55	72.49	14.076	44.20	48.410	51.05 25	59.436 147	23.76
	IO	19.37 60	F2 42	13.903 195	11.22	48.286	50.70	59.289 167	22 72
	20	18.77 62	7280	13.708 210	44.07	48.143	50.19 68	59.122 182	23.40 60
	30	18.15 62	73.58 80	13.498 214	43.48	47.987 161	49.51 81	58.940 1,88	22.80 87
Febr.	9	17.53 59	72.78	13.284 207	42.55 93	47.826	48.70 92	58.752 185	21.93 109
	19	16.94 53	71.44 183	13.077	41.32	47.668 146	17.78	58.567 170	20.84 127
	29	16-41 46	69.61	12.886	39.84 166	47 500	46.70	58.397	19.57
März	10	15.05 46	67.38	12.724 123	38.18	17 206	45 50 101	58 250	18.17 146
	20	15.95 35	64.82	12.601	2D AT	47.300 <sub>96</sub>	44.80	58.250 113 58.137 71	16.71 146
	30	15.60 23	64.83 <sub>275</sub> 62.08 <sub>285</sub>	TO 506 15	34.62 175	17 O 1 T	12.00	r8 066	15.25 137
	30	15.37 11				1	/ /	-3	
Apr.	9	15.26	59.23 283	12.505 37	32.87 162	47.225 31	43.14 58	58.043 30	13.88
	19	15.30	56.40 271	12.542 97	31.25	47.256 80	42.56	58.073 85	12.65
35 .	29	15.47 31	53.09 248	12.630 157	29.82 116	47.336 129	42.19 12	58.158 139	11.61 79
Mai	9	1 15.78	51.21 218	12.796	20.00 86	47.465 175	42.07 16	58.297	10.82
	19	16.21 54	49.03 181	13.008 263	27.80 53	47.640 218	42.23 43	58.488 237	10.33 19
	29	16.75	47.22	13.271 305	27.27 16	47.858 254	42.66	58.725 277	10.14
Juni	8	17.38	45.85 90	13.576 340	27.11 =	48.112	43.36 95	59.002 310	10.28 46
	18	18.09	44.95 42	13.916 365	27.31	48.396 306	44.31 118	59.312 335	10.74 77
	28	10.00	44.53 8	14.281	27.88	48.702 319	45.49 -20	59.647 349	11.51 106
Juli	8	19.66 81	44.61 58	14.661 386	28.78	49.021 325	46.87	59.996 355	12.57 131
	18	20.47 81	45.19 107	15.047 382	30.00	49.346	48.41 165	60.351 353	13.88
	28	21.28	46.26	15.429 369	31.51 <sub>174</sub>		50.06	1 00.704	15.42 171
Aug	7	22.07	47.77 151		33.25 195	40.080 314	51.78 174	61.046 342	17.13 .0-
	17	22.82 70	49.70 230	16.148 35° 16.148 325	35.20 210	50 277	53.52 172	01.3/4	18.98
	27	23.52 64	52.00 263	16.473 294	37.30 220	50.552 249	55.24 167	61.675 303	20.91 198
Sept.	6	24.16 56	54.63 289	16.767 260	39.50 226	50.801 <sub>220</sub>	56.91 157	61.950 244	22.89 199
-	16		57.52 311	17.027 200	41.76 228	51.021	58.48 146	62.194 211	24.88
	26	25.19 47	1 00.03	17.249 184	44.04 226	51.211 158	59.94	02.405	26.84 189
Okt.	6	25.57 29	103,09	17.433	46.30 219	51.369 125	01.20	62.581 141	28.73 180
	16	25.86 18	67.24 335	17.578 105	48.49 208	51.494 93	62.43	62.722	30.53 168
	25	21	333	17.683		51.587		62.827 69	
Nov.	25 4	26.04 8	70.59 329	17.003 64	50.57 195	51.507 62	63.43 84	60 806	32.21 152
	14	26.12 - 3	73.88 329	17.747 25	52.52	51.649 3° 51.679 1	64.27 66 64.93	62.020	33·73 <sub>135</sub> 35·08 <sub>116</sub>
	24	26.09 14	77.04 293	17.772 16	54.29 155	51.678	65.42	62.927 27	26.24
Dez.	4	25.95 25 25.70 34	79.97 263 82.60 226	17.756	55.84 130 57.14 101	ET 647 31	65 72 3	62 800	37.18 69
				92			_	1.	
	14	25.36 44	84.86	17.610	58.15 69	51.587 87	65.87	62.819 103	37.87 38.30
	24 34	24.92 51	86.67	17.483	58.84 35	51.500 113	65.82 22 65.60	62.716 <sub>132</sub> 62.584	38.45
70		24.41	87.96	17.324	59.19	51.307	05.00		30.43
	l. Ort	15.91	56.40	12.360	34.18	47.096	46.70	57.878	16.10
	s, tg δ	3.259	+3.102	1.347	+0.902	1.088	+0.428	1.216	+0.693
	a'	+5.I	+17.4	+3.7	+17.3	+3.4	$\pm 17.2$	3.6	+17.1
Ъ,	0	+0.18	— o <b>.</b> 49	+0.05	0.50	+0.02	- o.5I	+0.04	-0.52

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		ornacis	80) 67	Ceti	85) ξ²	Ceti			
10	<b>`</b> 8	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	2 <sup>h</sup> 9 <sup>m</sup>	+-66° 14′	2 <sup>h</sup> 10 <sup>m</sup>	-30° 59′	2 <sup>h</sup> 13 <sup>m</sup>	-6° 41'	2 <sup>h</sup> 24 <sup>m</sup>	+-8° 11′
Jan.	0	47.89	54.80	16.700	89.03 112	60.315 115	57.75	59.102	30.27
			91	16.549	00.T5	60.200	58.68	58.995	20.62
		47.08	56.00	16.373	00.88	60.067	EO 4E //	L EX XOX	28.06
		46.63	1/	16.187	33	59.923 150	60.06	58.726	28 22
Febr.		46.17	55.20	15 007	9	59·773 <sub>150</sub>	60.48	58.575 <sub>152</sub>	27 72
1 001.	9	i .	1	_	49	_	21		21.72 56
	19	45·73 <sub>41</sub>	53.98 168	15.812	90.63 88	59.623 140	60.69	58.423 146	27.16
	<b>2</b> 9	45.32 35	52.30 207	15.639 172	89.75	59.483	60.69	58.277	26.68
März	10	44.97 38	50.23	15.486 125	88.48	59.359 100	60.46	58.147	20.31
	20	44.69 20	4/.00 256	15.361 90	80.87	59.259 <sub>68</sub>	59.99 70	58.042 74	26.06
	30	44.49 9	45.30 266	15.271 49	84.94 221	59.191 31	59.29 94	57.968 37	25.96
Apr.	9	44.40	42.64 264	15.222	82.73 246	59.160 11	58.35 117	57.931 6	26.05
	19	44.41	40.00 253	15.219 46	80.27 265	59.171 55	57.18 140	57.937 <sub>51</sub>	26.25
	29	44.53	37.47 233	TE 265 40	77.62 279	59.226	55.78 161	57.088	26.85
Mai	9	44.75 32	35.14 204	1 260 93	74.83 286	59.326	54.17	58.085	27.58
	19	45.07 41	33.10 168	15.503 189	71.97 288	59.470 184	52.40 192	58.227 184	28.53
	29				1	59.654 220	50.48 202	58.411 220	20.68
Juni	8	45.48 45.97	31.42	15.692 230	69.09 <sub>283</sub> 66.26 <sub>271</sub>	59.874 220	48.46 206	58.631 251	
Oum	18	45.97 55	30.14 84	15.022 264	62.55 271	60.124	46.40 206	58 882 <sup>251</sup>	31.01 148
	28	46.52 60	29.30 38	16.186 292	63.55 251	60.124 274	46.40 205	58.882 276	32.49
Juli	8	47.12 62	28.92	16.478 313	61.04 224	60.398 289	44.35 200	59.158 291	34.08 167
Jun	0	47.74 64	29.02 56	10.791 323	58.80 193	60.687 298	42.35 187	59·449 <sub>301</sub>	35.75 168
	18	48.38 64	29.58 102	17.114 326	56.87 155	60.985 298	40.48	59.750 302	37.43 165
	28	49.02 62	30.60	1 17.440	55.32 112	61.283	30.70	60.052	39.08 158
Aug.	7	49.05 60	32.03 182	17.701 307	54.20 67	01.575	37.29 122	00.349	40.66
	17	50.25	33.85	10.000 287	53.53	01.854 261	36.07 92	00.034	42.12
	27	50.82 57	36.02 247	18.355 261	53.34 28	62.115 237	35.15 62	60.902 246	43.43
Sept.	6	51.34 46	38.49 272	18.616 229	53.62	62.352	34.53 29	61.148 222	44.55 90
	16	51.80 40	41.21 291	18.845	54.37	62.563	34.24	61.370	45.45 60
	26	52,20	1 44 72	19.039	55.54 156	62.745	34.27	61.564 166	46.14
Okt.	6	52.53 33 26	47.16		57.10 187	62.896	34.60	61.730	46.61
	16	52.79 18	50.29 313	19.313 78	58.97 210	63.016	35.19 82	61.866	46.86
	25*)			=4 /-		63.105 68	02	61.972	46.91
Nov.		52.97 10	53.42 307	19.391 40	61.07 225	62.163 58	36.01 100	62.049	16 70
1101.	4	53.07 2	56.49 295	19.431 2	63.32 230	63.163 29	37.01 113	62 006 4/	46.52
	14	53.09 6	59.44 275	19.433 33		63.192	38.14 120	62.113	1.6 40
Dez.	24	53.03 14	62.19 247	19.400 66	67.89 214	63.191 29	39.34 122	62.101	46.12 48
Dez.	4	52.89 22	213	19.334 97	70.03 194	63.162 56	40.56 119	02.101 40	45.64 56
	14	52.67 29	66.79	19.237 124	71.97 166	63.106 80	41.75 112	62.061 68	45.08 60
	24	52.38	68.50	19.113	73.63	63.026	42.87	61.993	44.48 63
	34	52.03	69.74	18.965	74.97	62.923	43.87	61.899	43.85
Mittl	Ort	44.64	40.36	15.946	76.17	59.323	52.00	57.890	31.71
sec 8		2.483	+2.272	1.167	-0.60I	1.007	-0.117	1.010	-+-0.144
a,		+4.7	+16.9	+2.6	-0.001	1	-0.117 +16.7		+16.2
<i>a</i> , <i>b</i> ,			-	-0.03	-	+3.0 0.0T	- 0.55	+3.2 +0.01	
υ,	9	+0.13	— o.54	-0.03	— 0.54	0.01	0.55	1 -0.01	— o.59

<sup>\*)</sup> Bei Stern 85) lies Okt. 26.

Т	ag	87) 36 H.	Cassiopeiae	90) µ	Hydri	89) v	Arietis	91) 8	Ceti
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1	940	2 <sup>h</sup> 32 <sup>m</sup>	+72° 33′	2 <sup>h</sup> 32 <sup>m</sup>	-79° 21'	2 <sup>h</sup> 35 <sup>m</sup>	+21042	2 <sup>h</sup> 36 <sup>m</sup>	+0° 4'
Jan.	0	21.35 51	41-34 136	54.62 115	97.76 98	25.653 110	13.30 26	25.412	10.23 85
	IO	20.04	42.70 81	53.47 120	98.74 36	25.543	13.04 40	25.208	9.38 76
	20	20.20	43.51 24	E2 27	00.70	25.408 153	12.64	25.182	8.62 65
	30	19.03 64	43.75 34	51.04	98.86 83	25.255 164	12.11 65	25.041	7.07
Febr.	9	18.99 64	43.41 90	49.81 118	98.03 140	25.091 168	11.46 74	24.889 155	7.44 40
	19	18.35 60	42.51 143	48.63	96.63	24.923 162	10.72 80	24.734	7.04 24
	29	17.75	41.08	47.52 <sub>101</sub>	94.72 228	24.761	9.92 83	24.583 137	6.80
März	10	1/.22	39.20	46.51 89	92.34	24.615 121	9.09 82	24.446	6.74
	20	10.77 22	30.93	45.62 75	L OU.57	24.494 88	8.27 76	24.332 85	6.86
	30	16.44 21	34.38 273	44.87 58	86.46 311	24.406 48	7.51 65	24.247 49	7.17 53
Apr.	9	16.23 7	31.65	44.29 40	83.10	24.358 2	6.86	24.198 8	7.70 75
	19	16.16	28.85	43.89	19.50 265	24.356 46	6.35	$24.190 {36}$	8.45 97
	29	10.23	20.09 262	43.67 2	15.91 260	24.402 96	6.03	24.226 82	9.42 118
Mai	9	16.45	23.40	43.65	72.24	24.498	5.93 =	24.308	10.60 138
	19	10.79 47	21.06 209	43.82 36	08.03	24.642 188	6.06 37	24.434 168	11.98 155
	29	17.26 _0	18.97	44.18	65.16	24.830 228	6.43 61	24.602 206	13.53 169
Juni	8	1 1/.04	17.24 131	44.72 72	01.93 204	25.058 262	7.04 8.	24.808	15.22 ,-8
	18	18.51	15.93 85	45.44 86	50.99 256	25.320 287	7.89	25.040 264	17.00 .0.
2100	28	19.25	15.08 38	46.30 99	56.43	25.607	8.94	25.310 282	18.84
Juli	8	20.05 83	14.70	47.29 108	54.32 161	25.913 317	10.17	25.592 293	20.68 179
	18	20.88 84	14.80	48.37 115	52.71 105	26.230 319	11.54 147	25.885 297	22.47 168
1	28	21.72 0	15.37 103	49.52 118	51.66 46	20.540	13.01	26.182	24.15
Aug.	7	22.50	16.40	50.70	51.20	20.805	14.54	20.470	25.00 134
	17	23.38 77	17.86	51.87 112	51.34 75	4/.1/0 288	10.09 772	20.700 260	27.02
	27	73	19.73 222	53.00 <sub>106</sub>	52.09 134	27.458 <sub>267</sub>	17.01	27.029 249	28.13 85
Sept.	6	24.88 66	21.05 254	54.06 <sub>93</sub>	53.43 188	27.725 243	19.08	27.278 226	28.98 57
	16	25.54 59	24.49 281	54.99 79	55.31 <sub>237</sub>	27.968 216	20.45 726	27.504 200	29.55 28
01.4	26	20.13	27.30 <sub>301</sub>	55.78 <sub>61</sub>	57.08	28.184 187	21.71	27.704 172	29.83 2
Okt.	6	20.03	30.31 316	56.39 42	00.45	28,37I	22.84 99	27.876	29.85 =
	16	27.03 31	33.47 324	56.81 21	03.32 326	20.520 127	23.83 84	28.019 114	29.62 45
.0	26	27.34 20	36.71 30.06 325	57.02 <sub>2</sub>	66.78	28.655	24.67 69	28.133 83	29.17 65
Nov.	4	27.54 9	$39.96_{320}^{325}$ $43.16_{305}^{305}$	57.00 23	1 226	28.750	25.36 54	28.216	28.52 78
	14	27.63	43.16 305	56.77	13.31 208 1	28.814	25.90	28.270 24	27.74 88
D.	24	27.00	46.21 283	50.32	10.43 278	20.040	26.31 26	28.294 5	26.86 94
Dez.	4	27.45 26	49.04 252	55.68 82	79.23 237	28.845 33	26.57 12	28.289 35	25.92 95
	14	27.19 37	51.56 215	54.86 <sub>96</sub>	81.60 187	28.812 65	26.69	28.254 62	24.97 93
	24	20.02 46	53.71 168	53.90 108	83.47	28.747 05	26.67	28.192 00	24.04 88
	34	26.36	55.39	52.82	84.80	28.652	26.50	28.102	23.16
Mittl.	Ort	16.73	27.79	53.65	77.05	24.191	11.13	24.233	14.69
sec δ,		3.336	-+3.183		-5.329		+0.398		+0.001
a,		+5.7	+15.8		+15.7		+15.6	+3.1	+15.6
b,	b'	+0.17	- 0.62		- 0.62		- o.63		- o.63

		93) <del>8</del> 1	Persei	97) π	Ceti	98) µ	Ceti	100) 41	Arietis
Ta	g	AR.	Dekl_	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	2 <sup>h</sup> 4c <sup>m</sup>	+48° 58'	2 <sup>h</sup> 41 <sup>m</sup>	-14° 6′	2 <sup>h</sup> 41 <sup>m</sup>	+9° 51′	2 <sup>h</sup> 46 <sup>m</sup>	+27° o'
Jan.	0	n ccr	42.92 67	T6 006	51.52	42.983 100	41.15 60	28 225	54.07
Jan.	10	7.551 <sub>179</sub>	42.50	16.881 136	52.68	42.883 123	40 55	28.335	54.97 5
	20	7.372 214	43.59 28 43.87	16.745	F2 60	42.760 141	40.55 61	28.224	54.92 54.69
		7.158 241		16.745	54.28	42.700 141	39.94 <sub>61</sub> 39.33 <sub>50</sub>	28.085 160	F4.05 44
Febr.	30	6.917 256	43.75	16.592 163	54.68	42.619 154	1 -0 - 1 39	27.925 174	54.27 58
rebi.	9	6.661 260	43.23 89	16.429 166	_	42.465 158	J	27.751 179	53.69 74
	19	6.401 249	42.34 123	16.263 162	54.80 16	42.307 153	38.18	27.572 175	52.95 87
	29	0.152	41.11	16.101	54.64	42.154	37.68	27.397	52.08 94
März	10	$5.927_{-188}$	39.59 174	15.952	54.19 73	42.013 118	37.26	27.236	51.14
	20	5.739 140	37.85 188	15.825 98	53.46 <sub>101</sub>	41.895 88	36.95	27.101	50.15 98
	30	5.599 82	35.97 195	15.727 61	52.45 127	41.807 51	36.78 <sub>1</sub>	26.999 61	49.17 92
Apr.	9	5.517 18	34.02	15.666	51.18	41.756 9	36.77 18	26.938 14	48.25 80
	19	5.499 50	32.10	15.645 23	49.05	41.747 36	36.95 38	26.924 37	47.45 64
	29	5.5498	30.28	15.668	47.90 106	41.783	37.33 59	26.961 88	46.81
Mai	9	5.667	28.63	15.737	45.94	41.866	37.92 80	27.049 138	46.36 22
	19	5.850 244	27.21 112	15.852 158	43.83 224	41.994 171	38.72 101	27.187 186	46.14 3
	29	6.094 299	26.09 80	16.010	41.59 230	42.165 209	39.73 120	27.373 228	46.17 27
Juni	8	0.303	25.20	1 10.207	39.29	42.374	40.93	27.601	46.44
	18	6.738 380	24.84 9	10.430	36.98 236	42.616	42.28	27.865	46.07
	28	7.118 406	24.75 28	10.007	34.72 215	42.885 288	43.76 156	28.157	47.74 98
Juli	8	7.524 422	25.03 63	16.976 293	32.57 198	43.173 299	45.32 159	28.470 313	48.72 116
	18	7.946	25.66	17.269	30.50	43.472	46.91 158	28.796	49.88
	28	8.373 424	26.62	17.507	28.84	43.774 300	48.49	29.127 331	51.19 143
Aug.	7	8.797 412	27.88	1 17 804	27.37	44.074 291	50.02	29.455 319	52.62 143
	17	9.209 392	29.41	1 18.153	20.22	44.365 277	ET 46 144	29.774 304	54.11
	27	9.601 366	31.18 196	18.428 255	25.43 41	44.642 257	52.75 112	30.078 284	55.63 152
Sept.	6	9.967 335	33.14 211	18.683 232	25.02	44.899 234	53.87	30.362	57.15 149
•	16	10.302	35.25 222	18.915 205	24.00	45.133 209	E480 93	30.622	58.64
	26	10.602	37.47 228	10.120	25 24 33	45.342 182	55.52	30.856 206	60.06
Okt.	6	10.864 221	39·75 <sub>232</sub>	19.296	26.04 70	45.524	56.02	31.062	61.39 133
	16	11.085 178	42.07 230	19.441	27.05 101	45.678 154	56.34 12	31.238	62.61
	26	1	44.37 224		28.31	45.802	e6 46	31.382	62.72
Nov.	4	11.263 11.396 85	⊥ 46.6T	19.555 81	29.78 160	45.897 65	16.40	2T 4O4	64 87 99
	14	11.481 37	48 74	19.686	31.38 166	45.962	F6 00	31.573 <sub>46</sub>	65.56
	24	$11.518 \frac{37}{12}$	48.74 198 50.72 178	19.000 19	32.04	45.902 35	rr.88 3"		66.27
Dez.	4	11.505 63	52.50 154	19.705 13 19.692 43	33.04 <sub>165</sub> 34.69 <sub>158</sub>	46.001 4	55.46 48	$31.629 \frac{10}{26}$	66.84 57
	14	11.442		19.649	1	45.075	54.08	27 602	67.25
	24	11.332 156	54.04 55.28	TO 556 /3	36.27	J-	E1 11	31.5/12	6
	34	11.176	56.18	19.476	37·72 <sub>128</sub> 39.00	45.919 85	53.87	31.450	67.58
M:441									
	l. Ort	5.305	33.95	15.919	42.66	41.666	42.85	26.718	51.92
	a'	1.524	+1.149	1.031	-0.251	1.015	+0.174	1.122	+0.510
	a b'	+4.1	+15.3	+2.9	+15.3	+3.2	+15.3	+3.5	+15.0
υ,	U	+0.06	- 0.64	0.01	- o.65	+0.01	— o.65	+0.03	0.66

# Obere Kulmination Greenwich

T	9.07	101) β Έ	ornacis	102) τ²	Eridani	103) τ	Persei	104) η ]	Eridani
		AR.	Dekl.	AR.	Dekl,	AR.	Dekl.	AR.	Dekl.
19	40	2 <sup>h</sup> 46 <sup>m</sup>	-32°39'	2 <sup>h</sup> 48 <sup>m</sup>	-21° 14'	2 <sup>h</sup> 49 <sup>m</sup>	+52°30′	2 <sup>h</sup> 53 <sup>m</sup>	-9° 7'
Jan.	0	35.728 154	38.99 143	20.006	72.47 132	61.820 191	75.26 87	30.829 103	76.92
	10	35.574 178		19.882	73.79 102	61.629 232	76.12	30.726 128	78.03
	20	35.396	41 47	19.736 165	1748T	61.397 <sub>263</sub>	76.60 47	30.598 146	78.07
	30	35.201 205	42.00	19.571 176		61.134 283	76.66	30.452	70.60
Febr.	9	34.996 208	42.28	19.395 180	75 87 30	60.851 288	76.20 37	30.293 165	80.10
			24		_		79		/
	19	34.788 201	42.04 66	19.215 176	75.89 33	60.563 280	75.50 116	30.128 162	80.46
22000	29	34.587 187	41.38	19.039 162	75.56	60.283	74.34	29.966	80.49 =
Marz	10	34.400	40.31	18.877	74.89 100	00.028	72.85	29.814	80.26
	20	34.237 131	38.85 181	18.735	73.89 131	59.810	71.10	29.083	79.78 73
	30	34.106 92	37.04 213	18.623 76	72.58 161	59.643 106	69.17 204	29.579 69	79.05 98
Apr.	9	34.014 48	34.91 240	18.547 35	70.97 187	59·537 <sub>38</sub>	67.13	29.510 29	78.07
	19	22.066	32.51 264	I TX ET2	69.10 210	E0 400	05.07	20.481	76.85 146
	29	22.067	29.87 280	18.522 58	67.00 230	59.533 107	63.08 184	29.496 60	75.39 165
Mai	9	34.019 102	27.07 292	18.580	64.70	59.640	61.24 163	29.556	73.74 184
	19	34.121	24.15 297	18.685 149	62.26 254	59.819 245	59.61 136	29.662 148	71.90 198
· ·	29	34.272 196	21.18	18.834 191	59.72 257	60.064	58.25 104	29.810 188	69.92
Juni	8	34.468 236	18.23	19.025	57.15 255	1 00.300	57.21 69	29.998 223	07.85
	18	34.704 270	15.38 269	19.252 256	54.60 245	1 00.723 206	56.52 33	30.221	65.73 211
T. 11	28	34.974 295	12.69	19.508 280	52.15 229	01.119 426	$56.19 = \frac{5}{5}$	30.472	63.62
Juli	8	35.269 313	10.25 215	19.788 296	49.86 207	61.545 445	56.24 42	30.745 287	61.58
	18	35.582 324	8.10	20.084 303	47.79 179	61.990 454	56.66	31.032	59.65
	28	35.906 326	6.33	20.387	46.00 145	1 02.444	57.43 110	31.326	57.91 150
Aug.	7	36.232 319	4.99 88	20.091	44.55 106	02.097	58.53 140	31.020 288	56.41 123
	17	36.551	4.11 39	20.988	43.49 65	1 03.340	59.93 ,66	31.908	55.18 92
	27	36.856 285	$3.72 \frac{39}{12}$	21.272 265	42.84 22	63.765 425	61.59 190	32.184 258	54.26 57
Sept.	6	37.141 259	3.84 <sub>61</sub>	21.537 242	42.62	64.164	63.49 208	32.442 237	F2 60
	16	37.400 259	4.45 109	21.779 215	42.83 64	1 04.532	65.57	32.679 212	E2 16
	26	37.629 194	5-54 151	21.994 185	43.47 102	64.865 333	67.80 234	32.891 186	F2 F0
Okt.	6	37.823 158	7.05 188	22.179	44.49 136	65.159 250	70.14 240	33.077	E4.04
	16	37.981 119	8.93 218	22.332	45.85 165	65.409 204	72.54 241	33.234 127	54.80 101
	26								
Nov.		38.100 81	11.11 238	22.452 86	47.50 185	65.613 156	74.95 238	33.361 96	55.81
	4	<sup>2</sup> 38.181 <sub>41</sub>	13.49 248	22.538 52	49.35 198	65.769 104	77.33 231	<sup>4</sup> 33·457 <sub>66</sub>	57.02 136
	14	38.222	15.97 249	22.590 19	51.33 203	65.873 50	79.64 217	33.523 34	58.38
Dez.	24	$\frac{38.223}{36}$	10.40	22.009 15	53.30 199	05.923	81.81	33.331 3	1 59.02 147
	4	38.187 72	20.86	22.594 48	55.35 188	65.919 60	83.80 176	33.560 28	61.29 142
	14	38.115 106	23.08 197	22.546 80	57.23 171	65.859 114	85.56	33.532 59	62.71
	24	38.009 136	25.05 165	22.466	58.94	65.745 165	87.02 112	33.473 87	64.04
	34	37.873	26.70	22.359	60.41	65.580	88.14	33.386	65.25
Mittl	L Ort	24 500	25.00	78.042	6T 46	50.222	66.22	20 640	60.14
sec 8	, tg &	34·733 1.188	25.09 —0.641	18.940	61.46	59.330	66.30	29.649 1.013	69.14 0.161
a,		+2.5		1.073	-0.389	1.643	+1.304	·	+14.6
ъ,		-0.03	+15.0	+2.7	+14.9	+4.3	+14.8 - 0.63	+2.9 -0.01	- 0.69
		0.03	<b>- 0.66</b>	-0.02	— o.67	+0.06	- 0.05	-0.01	- 0.09

Т	ag	106) & E	ridani $pr$	105) 47 I	H. Cephei	107)	z Ceti	108) γ	Persei
	ъ	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	2 <sup>h</sup> 55 <sup>m</sup>	-40° 32′	2 <sup>h</sup> 57 <sup>m</sup>	+79°10′	2 <sup>h</sup> 59 <sup>m</sup>	+3° 51'	3h om	+53°16′
Jan.	0	60.159 181	54.94 159	69.05 80	75.71 184	9.718 93	15.58	28.746 186	31.34 00
	10	59.978 208	56.53 113	1 68 2£	77.55 130	9.625 118	14.80	28.560 230	32-33 60
	20	59.770 228	F7 66	67.33 92	78.85	9.507 139	T4.08 /2	28.330	32.03 -0
	30	59.542 241	58.32 18	66.31 107	70.57	9.368	T2 42	28.065 288	33.11
Febr.	9	59.301 243	58.50 31	65.24 108	79.68 49	9.214 161	12.87 46	27.777 <sub>297</sub>	32.86 66
	19	59.058 238	58.10	64.16			12.41	27.480 291	
	29	58.820 222		h2.12	79.19 107 78.12 161	9.053 160	12.07	27.189 269	32.20 106
März	10	58.598 197	57.41 124	60.75	76.51	8.893 149	TT 06 21	26,020	31.14 140
	20	58.401 164	56.17 165	61.24	76.51 207	8.744 130	11.80	26.920 233 26.687 184	29.74 168
3.0	30	58.227	54·52 204 52·48 238	60.68	74.44 244	8.614 103 8.511 68	II.02	26.502	28.06 189
	30	58.237 122		00.08 48	72.00 271	1	30	26.503 123	26.17 202
Apr.	9	58.115 75	50.10 266	60.20 26	69.29 288	8.443 28	12.22	26.380 55	24.15 206
	19	58.040 22	47.44	59.94 5	66.41	8.415 16	12.72 71	26.325 ,8	22.09
	29	58.017 32	44.54	59.89 18	03.47 288	8.431 62	13.43 91	20.343	20.07 -
Mai	9	58.049 0-	41.47	60.07 39	60.59	8.493 108	14.34 111	20.436	18.18
	19	58.136 141	38.30 317	60.46 60	57.87 249	8.601 <sub>151</sub>	15.45 129	26.601 234	16.47
	29	58.277	35.10	61.06 78	55.38 218	8.752	16.74	26.835 296	15.02
Juni	8	58.468 236	31.94 304	6T.84	53.20 180	8.942	18.18	27.131	13.87 82
	18	58.704	28.00 .	62.78	51.40	9.166 253	19.75 165	27.480 349 392	T20=
	28	50.979 206	26.06 284	63.85 118	50.03	9.419 274	21.40 168		T2.50
Juli	8	59.285 329	23.50 231	65.03 125	49.12 43	9.693 288	23.08 167	28.298 448	12.50 9
	18	59.614 343	21.29 179	66.28	48.60	9.981 295	24.75 161	28,746	T2 77
	28	74.47/ - 0	19.50	67.58 131	48.74	10.276 296	26.36	29.206 461	T2 40
Aug.	7	60.305 345		68.89 130	10.28	10.572	27.85	29.667 453	T4 26
	17		T7 25	70.19 130	50.29 146	10.861	29.19	30.120 453	15.62
	27	60.983 333	$17.06 \frac{29}{27}$	71.46 121	51.75 187	11.138 261	30.34 93	30.120 438 30.558 415	17.16 179
Sept.	6	61,206	17.33 81	72.67 112	53.62	11.399 241	27.22	30.973 385	18.95 198
200	16	61.582	18.14	73.79 102	55.87 259	11.640	21.05	31.358 351	20.93 215
	26	61.836 217		74.8T	58.46 287	11.858	22 27 7	31.709 351	23.08 227
Okt.	6	62.053	21.24 <sub>217</sub>	75 71	61.33 310	12.051	22 54 -	32.022 270	25·35 <sub>236</sub>
	16	62.230 177	23.41 248	76.47 <sub>59</sub>	64.43 326	12.216	32.48 28	32.292 225	27.71 239
	26	62.363 89	25.89 269	77.06	67.60		22.22		
Nov.	4*)	02.452	28.58 <sub>280</sub>	77.40	67.69 336	12.354 <sub>108</sub> 12.462 79	27.71	32.517 32.692 123	30.10 238 32.48 232
-10.10	14	62.495	31.38 280	77.72	71.05 338	5 12.541 79	21.14	6 32.815 69	34.80 232
	24	62 101	34.18 269	77.78 -	74.43 331		20 10	22 884	27 01
Dez.	4	62.449 87	36.87 249	77 62	77.74 315 80.89 291	12.509 17	29.64 82	32.895 46	37.01 39.06 205 184
	~ .			37		-15	20 02	40	
	14	62.362	39.36 219	77.29 53	83.80	12.591 45	28.82 81	32.849 103	40.90 155
	24	62.236 161 62.075	41.55 182	76.76 71 76.05	86.38 <sup>258</sup> 215 88.53	12.546 77	27.22 79	32.746 158 32.588	42.45 124
	34	02.075	43.37	70.05	30.53		2/122	32.300	43.69
Mittl.		59.124	39.22	61.31	63.72	8.387	19.82	26.144	23.07
sec δ,		1.316	0.855		+5.235	1.002	+0.067	1.672	+1.340
a,			+14.4	+8.0	+14.3	+3.1	+14.2	+4.3	+14.1
Ъ,	b'	-0.04	0.69	$\pm$ 0.25	- o.70	0.00	— o.70		- o.71

<sup>&</sup>quot;) Bei Stern 105), 107) und 108) lies Nov. 5.

T	ag	109) ρ	Persei	110) μ H	Iorologii	111) β	Persei	114) δ	Arietis
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	3 <sup>h</sup> 1 <sup>m</sup>	+38° 36′	3h 2m	-59° 57′	3 <sup>h</sup> 4 <sup>m</sup>	+40°43′	3 <sup>h</sup> 8 <sup>m</sup>	+19°29′
Jan.	0	21.330 124	38.17	12.921	90.33 165	17.394 128	38.94	13.156	63.71
	10	21.206	28 6r ++	12.500	91.98	17.266	20 48 37	13.150 91	63.46
	20	21.047 186	28.78	12.214 399	02.08	17.101	20.74	12.945	63.12
	30	20.861 206	28.66	11.815 413	03.61	16.908 214	20.60	12.801 162	62.60 43
Febr.	9	20.655 214	38.25 68	11.402 414	93.57 61	16.694 224	39.33 65	12.639 172	62.19 58
	19	20.441	27.57	TO 588	92.96	16.470 221	28.68	12.467 172	61.61 62
	29	20.229 197	36.64 93	10.586 402	91.81	16.249	37.75 93	12.295 162	60.99 65
März	10		1 25 50	10.208	90.10	16.042	26.60	12.133 143	60 21
	20	TO 86T	24.20	9.868 340	88.03 <sub>253</sub>		35.26	11.990 113	59.71 <sub>58</sub>
	30	19.727 88	32.81	9.577 233	85.50 287	15.721 95	33.81 145	11.877	59.13 50
Apr.	9	19.639 35	31.38 139	9.344 166	82.63	15.626 41	32.30 149	11.800 34	58.63 38
	19	19.604 22	29.99	9.178 93	79.46	$15.585 \frac{41}{18}$	30.81	$11.766 \frac{34}{14}$	58.25 22
	29	19.626 80	28.69 114	9.085 16	79.46 338 76.08 351	T5-602	29.41	11.780	58.03 3
Mai	9	19.706	27.55	9.069 63	72.57	15.680 77	28.16 106	11.842	58.00 16
	19	19.843 191	26.62 69	9.132	68.99 358	15.816	27.10 82	11.952 156	58.16 38
	29	20.034 240	25.93 42	9.273 215	65.44	16.008	26.28	12.108 198	58-54 58
Juni	8	20.274	25.51 13	9.488	01.99 225	10.251 286	25.73 25	12.306	59.12 78
	18	20.556 216	25.38 = 15	0.772	50.74 208	16.537 322	25.48	12.341 266	59.90 07
	28	20.072	25.53 44	10.110	55.76 262	16.859 349	25.52	12.807 288	60.87 111
Juli	8	21.214 359	25.97 71	10.511 395	53.14 218	$17.208 \frac{349}{367}$	25.85 62	13.095 303	61.98 123
	18	21.573 367	26.68	10.947 464	50.96	17.575 376	26.47 88	13.398 312	63.21 131
	28	21.940 368	27.63 117	II.4II o	49.26	T7 OFT	27.35	13,710	64.52
Aug.	7	22.308 361	28.80	11.091	48.11 56	18.328 377	28.46	14.023 307	05.07 125
	17	22.660	30.15	14.5/.5	47.55 5	18.699 357	29.77 148	14.350 200	07.22
	27	23.016 347	31.65 161	12.843 446	47.60 65	19.056 337	31.25 162	14.627 281	68.53 124
Sept.	6	23.344 205	33.26 168	13.289	48.25	19.395 315	32.87 170	14.908 262	69.77
	16	23.049 208	34.94	13.699 362	49.50 <sub>181</sub>	19.710 .00	34.57	15.170 220	70.91 102
011	26	23.927 747	36.67	14.061 306	51.31	19.998 258	36.34 181	15.409 214	71.93 88
Okt.	6	24.174 216	30.41	14.367	53.00	20.250	38.15 180	15.623 .0-	72.81 74
	16	24.390 181	40.13 168	14.609 172	56.30 301	20.480 190	39.95 178	15.810 159	73.55 61
**	26	24.571 145	41.81 161	14.781 99	FO 2T	20.670 152	41.73 172	15.969 129	74.16 47
Nov.	5	24.716 106	43.42	14.880 23	62.52 <sub>328</sub>	20.822	43.45 - 6-	16.098	74.63 34
	14	24.822 66	44.94 140	614.903 = 73	1 777	<sup>7</sup> 20.934 7°	45.08 153	8 16.197 66	74.97 23
D	24	24.888 24	46.34 125	14.851 123	69.03 306	21.004 27	46.61 137	16.263 32	75.20 12
Dez.	4	24.912 18	47.59 107	14.728 190	72.09 279	21.031 7	47.98 120	16.295 3	75.32 2
	14	24.894 61	48.66 86	14.538 252	74.88	21.013 62	49.18 98	16.292 38	75.34 8
	24	24.833 103	49.52 62	14.200	77.28 195	20.951 105	50.16 73	16.254 72	75.26 16
	34	24.730	50.14	13.982	79.23	20.846	50.89	16.182	75.10
Mittl	. Ort	19.349	33.10	11.777	71.41	15.330	33.59	11.574	63.97
	tg 8	1.280	+0.799	1.998	-1.730	1.320	+0.861	1.061	+0.354
a,		+3.8	+14.1	+1.4	+14.0	+3.9	+13.9	+3.4	+13.7
Ъ,	6'	+0.04	- o.71	-o.o8	- o.71	+0.04	- 0.72	+0.02	- 0.73

Ta	ag	117) α Fo	ornacis	115) 48 H	I. Cephei	120) α	Persei	121) 0	Tauri
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	3 <sup>h</sup> 9 <sup>m</sup>	-29° 13′	3 <sup>h</sup> 12 <sup>m</sup>	+77° 30′	3 <sup>h</sup> 20 <sup>m</sup>	+49° 38′	3 <sup>h</sup> 21 <sup>m</sup>	+8° 49'
Jan.	0	32.414 132	34.68 158	44.85 62	72.50 193	4.135 147	63.68	36.324 80	4.74 62
	10	32.282 160	36.26	44.22	74.43	3.988 147	64.68 66	36.244	4 12
	20	32.122 182	27 47	12.46		3.795 230	65 24	36.134	2.51
	30	31.940	38.30	42 6T	75.86 87 76.73 28	3.565 258	65.63	35.999	2.03
Febr.	9	31.743 204	28 72 42	41.70	77 OT	3.307 273	65.54	35.845 166	2.20
			-	93	31		17		2.39 49
	19	31.539 203	38.73	40.77 91	76.70 89	3.034 272	65.07 84	35.679 168	1.90
3.5.0	29	31.336	38.32 80	39.86 85	75.81 143	2.762 259	64.23	35.511 161	1.48
März	10	31.143	37.52	39.01 75	74.38	2.503	63.07	35.350 145	1.15
	20	30.971	36.33	38.26	72.47 229	2.273 -00	01.03 164	35.205 119	0.92
	30	30.827 109	34.78 187	37.64 <sub>46</sub>	70.18 259	2.085 135	59.99 179	35.086 87	0.81
Apr.	9	30.718	32.91	37.18 28	67.59 278	1.950	58.20 184	34.999	0.84
_	19	30.651 67	30.74 242	36.90	64.81 287	1.875 75	56.36 183	24.052 4/	T.05
	29	20 621	28.32 262	36.81	01.94	1.867 62	54.53 174	34,040	1.44
Mai	9	20 660	25 50	26.0T	59.08 273	1.929 130	52.79 158	34.002	2.01
	19	30.738 78	25.70 277 22.93 286	37.20 48	56.35 252	2.059 195	51.21	35.082	2.78 77
		/		40				*34	95
T:	29	30.865	20.07 287	37.68	53.83 224	2.254 255	49.84 110	35.216	3.73 112
Juni	8	31.037 213	17.20 283	38.32 78	51.59 189	2.509 308	48.74 82	35.391 212	4.85 126
	18 28	31.250 248	14.37 270	39.10 91	49.70 149	2.817 351 3.168	47.92 49	35.603 243	6.11
Juli	8	31.498 276	11.67 252	40.01	48.21 105	1 3.20 386	47.43 16	35.846 <sub>266</sub>	7.48 145
Juit	0	31.774 296	9.15 224	41.02 108	47.16 59	3.554 411	47.27 16	36.112 284	8.93 147
	18	32.070 310	6.91	42.10	46.57 13	3.965 426	47.43 48	36.396 294	10.40 146
	28	32.380 315	5.00 153	43.23 116	46.44	4.391 431	47.91 79	36.690	11.86
Aug.	7	32.695 313	3.47 109	44.39 116	46.79 35	4.822 431	48.70 106	36.987	13.26 130
	17	33.008 313	2.38 62	45.55	47.61	5.251	49.76	37.281 286	14.56 115
	27	33.312 288	1.76	46.68	48.86	5.668 417	51.07 153	37.567 273	15.71 97
Sept.	6		1.63		50.53 206	6.068	52.60 172	37.840 256	16.68
ocp.	16	33.600 <sub>267</sub> 33.867 <sub>241</sub>	2.00	47.77 <sub>102</sub> 48.79 <sub>04</sub>	52.59 239	6.445 349	54.32 186	38.096 236	17.46
	26	1 24 TOX		40.72	54.98 270	6.794 <sub>316</sub>	56.18	38.332 213	18.03 57
Okt.	6	212	2.84 129	50.58	57.68 293	7.110 279	58.16	38.545 188	18.28 33
	16	24.408	4.13 167 5.80 199	"T 20 /~	60.61 293	7.389 240	60.23 210	38.733 162	T8 ==
				51.30 60					1
	26	34.642 108	7.79 223	51.90 45	63.73 324	7.629 196	62.33 212	38.895	18.48 22
Nov.	5	34.750 60	10.02	52.35	00.97 220	7.825	64.45 208	39.029	18.26
	14	34.019 32	12.40	52.64 12	326	7.974 99	66.53 201	39.133	17.91 46
_	24	34.851 6	14.83 238	52.76	73.52	0.0/3 45	08.54 188	39.200 41	17.45 54
Dez.	4	34.845	17.21 226	52.71 22	76.65 292	8.118	70.42	39-247 7	16.91 59
	14	34.801	19.47 204	52.49 30	79.57 262	8.109 64	72.13 148	39.254 28	16.32 61
	24	34.722 79	21.51 176	F2.T0	82.19 224	8.045	73.61 121	39.226 61	15.71 61
	34	34.609	23.27	52.10 <sub>56</sub> 51.54	84.43	7.927	74.82	39.165	15.10
71:441	l. Ort								
	i. ort	31.262	21.35	37.86	61.95	1.619	57.66 ±r.177	34.836	8.56
	a'	1.146	—o.559 ⊥12.6	4.627	+4.517	1.544	+1.177	1.012	+0.155 +12.8
b,		+2.5	+13.6	+7.6	+13.4	+4.3	+12.9	+3.2 +0.0T	+12.8
υ,	9	-0.03	<b>-</b> 0.74	+0.20	- o.74	+0.05	— o.77	+0.01	- 0.77

#### Obere Kulmination Greenwich

Ta	ø	122) 2 H.	Camelop.	125) 5	Tauri	127) E E	ridani ¹)	131) δ	Persei
10	ъ	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
194	0.	3 <sup>h</sup> 24 <sup>m</sup>	+59°43'	3 <sup>h</sup> 27 <sup>m</sup>	+12° 43′	3 <sup>h</sup> 30 <sup>m</sup>	-9° 39′	3 <sup>h</sup> 38 <sup>m</sup>	+47°35
Jan.	0	14.703 206	66.77	34.947 76	53.69	7.430	45.80	41.036 119	55.11
	10	14.497 265	68 20 13 L	34.947 76 34.871 108	53.22	7.340 119	47.05 106	40.917 168	56.15
	20	14.232	69.23	34.763	52.73	7.221	49	40.749 209	56.80
	30	14.232 13.918 348	60.8T 30	34.628	52.22	7.077	1805 04	40.540 240	57.30
Febr.	9	13.570 348	$69.93 \frac{12}{35}$	34.473 168	51.73 49	6.914 174	49.55 36	40.300 260	57.36 30
	19	13,204	69.58 80	34.305 172	51.24 46	6.740	49.91 10	40.040 265	57.06 64
	29	12.839 347	68.78	34.133 165	50.78 42	0.503	50.01 17	39.775	56.42 96
März	10		67.56	33.968	50.36 36	6.392	40.84	39.518 233	55.46 123
	20	12.182 310	65.98 158	33.819 125	50.00 26	0.230	49.42 68	39.285 198	54.23 145
	30	11.924	64.10	33.694 91	49.74 15	6.104, 99	48.74 93	39.087 150	52.78 161
Apr.	9	11.733 113	62.00	33.603 52	49·59 <sub>1</sub>	6.005 62	47.81 118	38.937 93	51.17 160
	19	11.620 30	59.78 226	33.551 7	49.58 16	5.943 20	46.63	38.844 31	49.48
	29	11.590 57	57.52 220	33.544 39	49.74	5.923 26	45.22 162	38.813 35	47.78 164
Mai	9	II-047 142	55.32 208	33.583 87	50.08	5.949 71	43.60 ,81	38.848 102	46.14 151
	19	11.790 226	53.24 188	33.670 132	50.60 71	6.020 116	41.79 195	38.950 166	44.63
	29	12.016	51.36 161	33.802	51.31 89	6.136	39.84 205	39.116 225	43.29 111
Juni	8	12.318	49.75	33.976	52.20	6.294	37.79	39.341	42.18 84
	18	12.687 425	48.44 96	34.187	53.24	6.489 227	35.68 211	39.619	41-34 50
5111	28	13.112	47.48 60	34.430 268	54.41 128	0.710	33.57 205	39.942 360	40.78 27
Juli	8	13.583 504	46.88	34.698 286	55.69 134	6.968 272	31.52 193	40.302 387	40.51
	18	14.087 526	46.66	34.984 296	57.03 135	7.240 284	29.59 177	40.689 406	40.55
	28	14.613 535	46.83	35.280 301	58.38 133	7.524 280	27.82	41.095	40.88
Aug.	7		47.37 89	35.581	59.71 127	7.813	26.29 126	41.5096	41.48 8
	17	15.083	48.26	35.880	60.98	8.101	25.03 94	41.925	42.34
	27	505	49.48 152	36.171 279	62.14 103	8.382 269	24.09 59	42.334 396	43.44 13
Sept.	6	16.712	51.00 179	36.450 263	63.17 86	8.651 253	23.50 23	42.730 378	44.75 145
	16	1 17.104	52.79 204	36.713 243	64.03 69	0.904 222	23.27 13	43.100 252	46.23 16:
Old	26	17.032	54.83	36.956 221	64.72	9.130	23.40 49	43.401	47.85 17
Okt.	6	10.034	57.05 238	37.177 197	65.23 32	9.345 184	23.89 80	43.780 202	49.59 18
	16	10.390 304	59.43 250	37.374 171	65.55 16	9.529 156	24.69 109	44.079 257	51.42 18
NT.	26	18.694 247	61.93 255	37.545 143	65.71	9.685 127	25.78 131	44.336 217	53.31 19
Nov.	5	TX.04T -	04.48	37.688	65.71	9.812	27.00	44.553	55.23 100
	14*)	19.126 118	67.04 252	37.801 82	65.58 23	9.909 64	28.50 157	44.720 125	57.13 180
Don	24	19.244 47	09.50	37.883 49	65.35 31	9.973 31	30.13 161	344.851 74	50.99 17
Dez.	4	19.291 25	71.96 223	37.932 14	65.04 37	10.004 3	31.74 157	44.925 20	60.76 16
	14	19.266	74.19 198	37.946 22	64.67	10.001 38	33.31 148	44.945 35	62.39 14
	24	19.169 168	76.17 167	37.924 57	64.25	9.963 70	34.79 135	44.910 80	63.84 12
	34	19.001	77.84	37.867	63.81	9.893	36.14	44.821	65.07
	l. Ort	11.473	59.36	33.384	56.76	6.089	36.73	38.532	50.98
	5, tg 8	1.984	+1.714	1.025	+0.226	1.014	-0.170	1.483	+1.095
	a'	+4.9	+12.6	+3.3	+12.4	+2.9	+12.2	+4.3	+11.6
D <sub>s</sub>	b'	+0.07	— o.78	o.0I	- o.79	-o.or	- 0.79	+0.04	- 0.82

Die jährliche Parallaxe (0"310) ist bereits berücksichtigt.
 Bei Stern 131) lies Nov. 15.

T	19	134) 4	Persei	141) β Ι	Reticuli	139) η	Tauri	138) γ	Camelop.
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	3 <sup>h</sup> 41 <sup>m</sup>	+42° 23'	3 <sup>h</sup> 43 <sup>m</sup>	-64° 59′	3 <sup>h</sup> 43 <sup>m</sup>	+23°55′	3 <sup>h</sup> 43 <sup>m</sup>	+71°8'
Jan.	0	8.825 101	29.63 82	28.16	61.90 213	56.566	14.81	64.36 32	67.30 202
	10	8.724 146	20.46		64.03 162	56.495 106	14.83	64.04 43	
	20	8.578 184	21 02 3/	27.36 48 26.88	65.65 106	56.389 139	14.74	63.61 43	70.00
	30	8.394 214	21.22		66 MT	56.250 164	14.54	63.61 51 63.10 56	72 OT
Febr.	9	8.180 233	21.21	26.37 <sub>52</sub>	67.20	56.086 180	14.23	62.54 60	72 50
	9		32.32		10		4.		159 3
	19	7.947 239	30.99 61	25.85 52	67.10 66	55.906 187	13.82	61.94 61	72.62
	29	7.708	30.38 88	25.33	66.44	55.719 183	13.30	61.22	72.10
März	10	7.470 212	29.50	24.82	65.23	55.536 160	12.71 64	00.74	71.07
	20	7.204 .0-	28.40	44.35 42	1 03.52	55.367 144	12.07 65	00.20	69.56 TOT
	30	7.084 137	27.11 140	23.92 37	61.36 257	55.223 110	11.42 64	59.75 37	67.65 223
Apr.	9	6.947 86	25.71	23.55 29	58.79 292	55.113 60	10.78	59.38 26	65.42 246
	19		24.26	23.26 22	55.87	CC 044	TO 2T 3/	59.12 13	62.96 260
	29	6.822		23.04 13	55.87 320	55.000	0.72	58.99 1	60.36 264
Mai	9	6.866	21.44 123	22.91 4	52.67 341 49.26 353	r= 0r0	0.20	59.00 13	57-72 258
2000	19	6.959 93	20.21 106	$22.87 - \frac{4}{6}$	45.72 353	CC T28	0.21	59.13 26	55.14 245
	~ 9				45.73 358	120	9.21		
	29	7.111 208	19.15 85	22.93 14	42.15	55.254 172	9.21 18	59.39 38	52.69 222
Juni	8	7-319	18.30 60	23.07	30.01	55.426	9.39 38	50.77	50.47 101
	18	1+7/0 - 0	17.70 33	23.30 31	35.19 220	55.639	9.77 56	00.20 _0	48.53 161
	28	7.07/	17.37 6	23.01	31.99	55.886	10.33 72	00.04 6-	46.92
Juli	8	8.206 332	17.31 20	24.00 44	29.08 252	56.162 296	11.05 86	61.49 72	45.69 82
	18	8.564	17.51		26.56 207		11.91		11 9=
	28	8.564 8.938 383	T7 06 43	24.44 <sub>49</sub> 24.93 <sub>53</sub>	24.40	56.458 311 56.769 317	12.88 97	62.21 62.98 77	11.16
Aug.	7	0.221	T8.65	25.46	24.49 <sub>154</sub> 22.95 <sub>08</sub>	57.086 317	13.93	63.77 81	44.48
	17	9.705 378	TO 56	25.46 55 26.01 56	27.07	57.404 313	15.03 110	64.58 80	4.4
	27	10.083 378	20.65 126	26.57 <sub>54</sub>	27 67	57.717 302	16.13 109	65.38 78	44.92 85 45.77 124
	~ /	366	1		27				
Sept.	6	10.449 349	21.91 138	27.11 52	21.88 89	58.019 289	17.22 103	66.16	47.01 160
	16		23.20	27.03	22.77	58.308	18.25 96	00.01	48.61 104
	26	11.125	24.77 156	1 28.10	24.20	50.570	19.21 88	07.02	50.55 222
Okt.	6	11:40/	1 40.55 -/-	20.52	20.31	50.027 226	20.09 79	08.27	52.78 240
	16	11.699 240	27.94 163	28.88 28	28.84 292	59.053 200	20.88 69	68.85 51	55.27 270
	26			29.16 19		50.252	21.57 60	69.36 41	
Nov.	5	11.939 205	29.57 164	29.10 19	31.76	59.253 172	22 17	69.77 32	57-97 286
	15	12.144 164 12.308 122	31.21 160	29.35 10	34.97 337	59-425 140	22 68 51	70.00	60.83 295
	24		32.81 156	29.45 I 29.46 8	38.34 342 41.76 332	17 <sup>59.565</sup> 107 59.672 71	23.11 43	70.09 21 70.30 9	63.78 <sub>297</sub> 66.75 <sub>291</sub>
Dez.	4	T2 506	34·37 <sub>147</sub> 35·84 <sub>135</sub>	29.38	17.08 332	50 712 71	22 46 33	70 20	69.66 279
	Т	12.500 27	33.04 135		3	39.743 32	23.40 27	3	279
	14	12.533 23	37.19 120	29.21 25	48.20 282	59.775	23.73 18	70.36 14	72.45 257
	24	12.510 74	38.39	28.96 33 28.63	51.02 240	59.768 47	23.91	70.22 26	75.02 226
	34	12.436	39.38	28.63	53.42	59.721	24.01	69.96	77.28
Mittl	l. Ort	6.531	26.68	26.40	43.20	54.759	16.02	59.29	60.27
	$tg \delta$	1.354	+0.913	2.366	-2.I44	1.094	±0.444	3.095	+2.929
a,	-	+4.1	+11.4	+0.7	+11.2	+3.6	+11.2	+6.3	+11.2
	b'	+0.03	- 0.82	-0.08	- o.83	+0.02	- o.83	+0.11	- 0.83

T	ag	140) τ <sup>6</sup>	Eridani	143) 138 (	d. Eridani	146) γ	Hydri	144) ζ	Persei
	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	3 <sup>h</sup> 44 <sup>m</sup>	-23° 25'	3 <sup>h</sup> 47 <sup>m</sup>	-36° 22'	3 <sup>h</sup> 48 <sup>m</sup>	-74° 25′	3 <sup>h</sup> 50 <sup>m</sup>	+31°42′
Jan.	0	17.266	45.28 175	13.815	66.04 202	11.28 64	42.84 210	23.252 73	25.51 38
	10	17.167	47.03	13.002	08.00	10.04	44.94 758	23.179	25.89 23
	20	17.035 -60	48.47	13.512	69.70	9.90 80	46.52 101	23.066	26.12
	30	16.875	49.58	13.313	70.91 76	9.10 80	47.53 43	22.918	26.17
Febr.	9	16.693 196	50.33 37	13.090 237	71.67 28	8.25 87	47.96 16	22.741 196	26.03 33
	19	16.497 202	50.70	12.853 243	71.95 18	7.38 87	47.80	22.545 205	25.70 51
	29	16.295	50.70 38	12.010	71.77 64	6.51	47.08	22.340	25.19 67
März	10	10.098 184	50.32	12.373 222	71.13	5.67	45.82	22.140 186	24.52 80
	20	15.914 161	49.59	12.151	70.05	4.00 71	44.06	21.954 160	23.72 80
	30	15.753 130	48.50 142	11.954 164	68.56 187	4.17 63	41.84 261	21.794 124	22.83 94
Apr.	9	15.623 92	47.08 171	11.790 123	66.69 220	3·54 <sub>52</sub>	39.23 294	21.670 81	21.89 94
	19	15.531 50	45.37	11.667 75	64.49	3.02	36.29	21.589 31	20.95 88
	<b>2</b> 9	15.481 3	43.38	11.592 25	01.98	2.02 27	1 33,07	21.558 = 22	20.07
Mai	9	15.478 45	41.15 241	11.567 27	59.24 202	2.35 14	1 20.05	21.580 76	19.28
	19	15.523 92	38.74 254	11.594 80	56.32 304	2.21 T	357	21.656	18.63 48
	29	15.615 137	36.20 262	11.674 130	53.28 308	2.22	22.55 352	21.784 177	18.15 29
Juni	8	15.752	33.58 262	11.804	50.20	2.37 -0	1 10.03	21.961	17.86 8
	18	15.031	30.95 258	11.982	47.15 204	2.65	115.04	22.181	17.78 =
	28	16.146	28.37	12.202	44.21	3.00 22	12.40 286	22.440	17.91 22
Juli	8	10.391 269	25.92 225	12.458 284	41.47 248	3.59 63	9.62 247	22.729 312	18.24 52
	18	16.660 287	23.67 198	12.742 307	38.99 214	4.22 71	7.15 201	23.041 329	18.76
	28	16.947 206	21.69 166	13.040	36.85 172	4.93 77	5.14	23.370 337	19.46 82
Aug.	7	17.243	20.03 128	I3.37I	35.13 126	5.70 82	3.65	23.707 339	20.29 95
	17	17.543 207	18.75 86	1 20.090 224	33.87 76	6.52 83	2.74 30	24.046	21.24
	27	17.840 287	17.89 40	14.023 318	33.11 21	7.35 82	2.44 33	24.381 325	22.28
Sept.	6	18.127 273	17.49 7	14.341 302	32.90	8.17	2.77 96	24.706 311	23.38 113
	16	18.400	17.56	14.043	33.23 87	00.6	3.73 155	25.017	24.51
Okt.	26	1 10.054	18.10	14.923 254	34.10		5.28	25.311	25.04
ORU.	6	18.885	19.08	15.177	35.48 184	1 10.32	7.39 258	25.583 248	26.76
	16	19.090 175	20.47 173	15.400 188	37.32 222	10.05 41	9.97 296	25.831 221	27.86 106
Nov.	26	19.265 144	22.20	15.588	39.54 252	11.26 28	12.93	26.052	28.92 101
1100.	5	19.409 109	24.20	1 15.738	42.06 273	11.54 12	10.17	26.243	29.93 95
	15	19.518 73	20.40	17 15.847 66	44.79 283	18 11.66 2	19.57 343	1820.401	30.88
$\mathrm{Dez}_{\mathbf{z}}$	24	19.591 36	233	-3-3-3 21	47.62 282	11.64 18	1 -0.00 224	20.522 82	31./0 82
	4	19.627 =	31.04 225	15.934 22	50.44 271	11.46 32	26.34 312	26.604 40	32.60 73
	14	19.625 41	33-29 211	15.912 67	53.15 251	11.14 46	29.46	26.644	33.33 62
	24	19.584 77	35.40 189	15.845	55.66		32.25 238	26.641 48	33.95 50
	34	19.507	37.29	15.736	57.88	10.08 57	34.63	26.593	34.45
Mittl	. Ort	15.907	32.97	12.437	51.19	8.79	23.70	21.252	25.41
sec 8	tg 8	1.090	-0.433		<b>−</b> 0.737	3.724	-3.587		+0.618
a,		+2.6	+11.2		+11.0	-0.9	+10.9	+3.8	+10.7
Ъ,	U	-0.02	— o.83	-o.o3	— o.84	-0.13	- 0.84	-1-0.02	— 0.84

Ta	1.0	145) 9 H.	Camelop.	147) ε	Persei	148) ξ	Persei	149) γ ]	Eridani
	~p	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	3 <sup>h</sup> 52 <sup>m</sup>	+60°55′	3 <sup>h</sup> 53 <sup>m</sup>	+39°50′	3 <sup>h</sup> 55 <sup>m</sup>	+35° 37′	3 <sup>h</sup> 55 <sup>m</sup>	-13°40'
Jan.	0	3.71 18	72-29 169	51.431 83	19.58 78	6.022	13.30 58	15.135 76	51.02 151
	10	3.53 24	73.98	51.348 129	20.36 55	5.948 117	13.88 40	15.059	52.53 129
	20	3.29	75.31	51.219 168	20.91 31	5.831 156	14.28	14.950	53.82
	30	3.29 2.98 35	76.23 92	51.051 199	21.22	5.675 185	$14.47 \frac{19}{3}$	14.812	54.86
Febr.	9	2.63 35	76.69	50.852 221	21.27 = 23	5.490 207	14.44 26	14.650 178	55.62 47
	19	2 25	76.69	50.631 230	21.04 50	5.283 215	14.18	14.472 186	56.09 18
	29	1.00 28	70.22	50.401	20.54 71	5.068	13.70 69	14.286	56.27
März	10		75.31	50.174	19.80	4.854 708	13.01 85	14.102	56.15 42
	20	1.13	74.00	49.963	18.84	4.656	12.16	13.929 153	55.73 71
	30	0.83 24	72.35 193	49.781 143	17.72	4.485 135	11.17 108	13.776	55.02 99
Apr.	9	0.59	70.42	49.638	16.48	4.350 90	10.09 110	13.652 88	54.03 125
	19	0.42 8	68.30	49.543 40	15.10	4.260 38	8.99 108	13.564 48	52.78 151
35.1	29	°·34 °	66.08	49.503 18	13.89	4.222	7.91 100	13.516	51.27 173
Mai	9	0.34 10	63.84 218	49.521 76	12.66	4.239 73	6.91 89	13.513 43	49.54 193
	19	0.44 18	01.00	49.597 134	11.54 96	4.312	6.02	13.556 88	47.61 209
	29	0.62	59.62	49.731 <sub>188</sub>	10.58 76	4.439 178	5.30	13.644	45.52 219
Juni	8	0.88	57.78 158	49.919 226	9.82	4.617	4.77 32	13.775	43-33
	18	1.22	56.20	50.155 278	9.27	4.842 264	4.45 10	13.940	41.09
~ 1.	28	1.62 46	54.93	50.433	8.97 6	5.106	4.35	14.152 236	38.84 218
Juli	8	2.08	53.98 59	50.745 339	8.91 18	5.403 322	4.47 33	14.388 258	36.66 206
	18	2.58 <sub>53</sub>	53.39 22	51.084 357	9.09 40	5.725 340	4.80	14.646 276	34.60 187
	28	1 5.11 .	53.17 =	51.441	9.49 62	1 0.005	5·33 <sub>71</sub>	14.922	32.73 162
Aug.	7	3.65 56	53.31	51.800	10.11 81	0.414	6.04 80	15.207 280	31.11 132
	17	4.21	53.80 82	52.100 267	10.02	0.707	6.89	15.496	29-79 o8
	27	4.76 55	54.63	52.547 359	11.89 110	7.117 350	7.87 108	15.783 280	28.81 60
Sept.	6	5.31 <sub>52</sub>	55.78	52.906 <sub>344</sub>	12.99 121	7.457 327	8.95 115	16.063 268	28.21 20
	16	5.83	57.22	53.250 225	14.20	7.784	10.10	16.331 252	28.01 21
01.	26	0.32 46	58.94	55.575 202	15.50	8.093	11.29	10.583	28.22 59
Okt.	6	1 0.70	60.89	53.877 276	16.86	8.381 263	12.50	10.814	28.81 06
	16	7.19 37	63.03 231	54.153 <sub>247</sub>	18.27	8.644 236	13.73 122	17.023 184	29.77 127
	26	7.56	65.34 243	54.400 213	19.69 142	8.880	14.95 120	17.207	31.04 153
Nov.	5	7.07	1 07,77	54.613	21.11	9.084	16.15 116	17.362 124 17.486 03	32.57 172
	15	8, 11.6	70.20 251	54.790 135	22.53 138	9.254 131	17.31	17.486 92	34-29 184
_	24	8.29	12.// 216	34.923 92	130	9.385 90	18.43 105	17.578 57	30.13 180
Dez.	4	8.40 2	75.23 234	55.017 43	25.21 121	9.475 46	19.48 96	17.635 21	38.02 186
	14	8.42	77.57 216	55.060	26.42 109	9.521	20.44 86	17.656	39.88 176
	24	8.37	79.73 190	55.055	27.51 91	9.520 47	21.30	17.639 53	41.64 162
	34	8.24	81.63	55.000	28.42	9.473	22.01	17.586	43.26
	l. Ort	0.20	67.20	49.181	18.10	3.901	12.73	13.691	40.67
	, $\operatorname{tg} \delta$	2.059	+1.799	1.302	+0.834	1.230	$\pm 0.717$	1.029	-o.243
a,		+5.1	+10.6	+4.0	$\pm$ 10.5	+3.9	+10.4	+2.8	+10.4
b,	b'	+0.06	— 0.85	+0.03	-0.85	+0.02	— o.86	-0.01	— o.86

# Obere Kulmination Greenwich

Ta	0.00	150) y	Tauri	151) v	Tauri	152) 48	Persei	154) o <sup>1</sup>	Eridani
	<b>*</b> 5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	3 <sup>h</sup> 57 <sup>m</sup>	+12° 19′	3 <sup>h</sup> 59 <sup>m</sup>	+5° 49′	4 <sup>h</sup> 4 <sup>m</sup>	+47° 33'	4 <sup>h</sup> 8 <sup>m</sup>	-6° 59′
Jan.		22.811	7 7 70	50.050	ar 20	20.250		SH FOT	10"01
Jan.	0	57	15.50 49	59.272 56 59.216 01	21.30 78	20.359 91	17.42 18.61	57·591 <sub>58</sub>	42.85
	10 20	22.754 92	15.01 48		19.81	20.268	44	57·533 <sub>94</sub>	44.17 116
	30	22.662 124 22.538 150	14.53 46	59.125 123 50.002 147	19.01 63	20.123 192	19.53 63	57.439 125	45·33 <sub>96</sub> 46.29
Febr.	9	22.388 150	13.62	58.855 166	18.63	19.931 <sub>230</sub> 19.701 <sub>256</sub>	20.46	57.314 152 57.162 170	17.02
I CDI.	9		43		1 73		4		3-
	19	22.221	13.19 39	58.689 175	18.18	19.445 269	20.42 38	56.992 180	47.54 28
3.5	29	22.044	12.80	58.514 174	17.83	19.176 266	20.04 71	56.812 182	47.82 5
März	10	21.808	12.45 30	58.340 164	17.59 12	18.910 250	19.33	56.630 172	47.87 =
	20	21.703	12.15	58.176	17.47 2	18.660 250	18.32 125	50.458	47.67
	30	21.560	11.94 10	58.032 116	17.49	18.440 176	17.07 145	56.304 127	47.23 68
Apr.	9	21.446 77	11.84	57.916 79	17.66	18.264	15.62	56.177 93	46.55 92
	19	21.369 35	11.85	57.837 39	17.99	18.140 <sub>64</sub>	14.00	56.084	45.63
	29	21.334 11	12.01 32	57.798 6	18.49 68	18.076	12.43	56.030	44.49 136
Mai	9	21.345 58	12.33 48	57.804	19.17 86	18.077 67	10.81	56.019 35	43.13
	19	21.403 104	12.81 65	57.856 <sub>96</sub>	20.03 103	18.144 132	9.27	56.054 80	41.58
	29	21.507 147	13.46 81	57.952 140	21.06	18.276	7.86	56.134 122	39.87 184
Juni	8	21.654 .86	14.27	58.092	22.23	18.460	0.63	56.256	38.03
	18	21.840	15.22	58.270	23.52	18.718	5.61 76	56.418	36.11
_	28	22.061	16.29	58.482	24.90	19.015 228	4.85 50	50.010	34.15
Juli	8	22.310 271	17.46	58.723 263	26.34 144	19.353 370	4.35 23	56.842 251	32.21 187
	18	22.581 286	18.68 123	58.986 278	27.78	19.723	4.12	57.093 268	30.34 173
	28	22.867	19.91	59.264 287	29.19	20.110	4.17 31	57.361 <sub>280</sub>	28.61
Aug.	7	23.101	21.11	59.551	30.51	20.524	4.48 56	57.641 284	27.07
	17	23.458	22.25 104	59.841	31.71 103	20.939	5.04 79	57.925 285	25.77 102
	27	23.753 286	23.29 90	60.130 281	32.74 82	21.352 406	5.83 101	58.210 279	24·75 7°
Sept.	6	24.039 275	24.19 73	60.411 269	33.56 <sub>61</sub>	21.758 393	6.84 118	58.489 269	24.05 36
	16	24.314 260	24.92 56	60.680	34.17 36	22.151	8.02	58.758 256	23.69
0.	26	24.574	25.48 28	00.935	34.53	22.525	0.37	59.014 228	23.69 34
Okt.	6	24.815	25.86 TO	01.173	34.66	44.0/5 222	10.86	59.252	24.03 66
	16	25.036 197	26.05 3	61.390	34.55	23.197 290	12.45 169	59.471 195	24.69 <sub>96</sub>
20	26	25.233 172	26.08	61.584 168	34.24 49	23.487 252	14.14	59.666 169	25.65 120
Nov.	5	25.405	25.96 24	61.752	33.75 64	23.739 210	15.89 ,78	59.835	26.85
	15	25.548 111	25.72 33	61.892	33.11 74	23.949 164	17.07	2359.976 110	28.23
D	24	<sup>2</sup> 25.659 <sub>78</sub>	25.39 40	02.001	32.37 80	24.113	19.44	00.080	29.14 157
Dez.	4	25.737 42	24.99 44	62.078 40	31.57 82	24.226 57	21.18 1/4	60.161 40	31.31 156
	14	25.779 3	24.55 46	62.118 4	30.75 82	24.283	22.83	60.201 2	32.87 150
	24	$25.782 \frac{3}{34}$	24.09 47	62.122	29.93 79	24.282 60	24.36	60.203 36	34.37 140
	34	25.748	23.62	62.088	29.14	24.222	25.70	60.167	35.77
Mittl	- Ort	21.141	20.08	57.668	27.45	17.758	15.40	56.058	33.66
sec 8	, tg 8		+0.218	1.005	+0.102	1.482	+1.093	1.008	-0.123
a,	a'	+3.3	+10.2	1+3.2	+10.0	+4.4	+9.7	+2.9	+9.3
ъ,	b'		— o.86	0.00	- o.87	+0.04	-o.88	0.00	<b>-0.88</b>
					•			D 40	

T	a.g	155) α H	lorologii	156) α	Reticuli	160) υ <sup>4</sup> Ε	ridani m	162) δ	Tauri
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	4 <sup>h</sup> II <sup>m</sup>	-42°26'	4 <sup>h</sup> 13 <sup>m</sup>	-62°37′	4 <sup>h</sup> 15 <sup>m</sup>	-33° 56′	4 <sup>h</sup> 19 <sup>m</sup>	+17°24′
Jan.	0	62.256	44.36	40.83 30	42.65 250	38.861 104	51.62 221	30.058 40	7.59 24
	10	02.110	40.7I	40.53	45.15	38.757	53.83 186	30.018 80	7.35 26
	20	1 01.030	48.66	40.17	47.17	38.614	55.69	29.938	7.00
	30	61.718	50.16	39.76 46	48.68 95	38.435	57.16	29.823	6.80
Febr.	9	61.471 267	51.18 52	39.30 48	49.63 39	38.228 228	58.19 59	29.677 169	0.50 32
	19	61.204 278	51.70 2	38.82	50.02	38.000 238	58.78	29.508 182	6.18
	<b>2</b> 9	60.926 276	51.72 48	1 38.33 0	49.83	37.762 238	58.91 33	29.326 185	5.03 26
März	IO	1 00.050	51.24 96	37.85	49.09 776	37.524 229	58.58 76	29.141	5.47 35
	20	60.386	50.28	31.30 42	47.83	37.295 209	57.82	28.964 158	5.12 33
	30	60.144 209	48.87 183	36.95 <sub>38</sub>	46.08 220	37.086 180	56.64 157	28.806 131	4.79 29
Apr.	9	59.935 169	47.04 220	36.57 32	43.88 259	36.906	55.07 193	28.675 96	4.50 21
	19	59.766	44.84 252	30.25	41.29	36.763 100	53.14	28.579	4.29 11
	29	59.645 69	42.31 280	36.00	38.30	36.663	50.89	28.526 g	4.18
Mai	9	59.576	39.51	35.83	35.1/ 228	36.611	48.38	28.518 39	4.19 15
	19	59.563 43	36.50 316	35·74 <sub>I</sub>	31.79 350	36.609 50	45.64 289	28.557 87	4.34 29
	29	59.606 98	33.34 322	35.73 8	28.29 353	36.659	42.75 297	28.644	4.63 44
Juni	8	59.704	30.12	35.81 16	24.76 353	36.758	39.78 299	28.770	1 5.07
	18	1 59.855	26.91	35.97	21.29 333	36.905 190	30.79 202	28.949	5.00 72
	28	00.054	23.81 293	36.21	17.90	37.095 228	33.87	29.158	1 0.00 K2
Juli	8	60.296 279	20.88 267	36.52 31	14.87 277	37.323 259	31.08 256	29.399 265	7.20 91
	18	60.575 307	18.21	36.90 42	12.10 236	37.582 285	28.52 226	29.664 283	8.11 96
	28		15.89 190	37.32 47	9.74 189	37.867 303	26.26	29.947 296	9.07
Aug.	7	61.211 329	13.99	37.79 50	7.85	38.170 314	24.37	30.243 301	10.05 95
	17	01.552	12.56 89	38.29	I D.51	30.404	22.91 98	30.544	11.00
	27	61.899 344	11.67 33	38.80 51	5.76 75	38.801 317	21.93 45	30.846 298	11.90 82
Sept.	6	62.242	11.34 25	39.31	5.64 51	39.116 305	21.48	31.144 289	12.72 71
	16	02.5/0 272	11.59	1 30.80	6.15	39.421	21.56 63	31.433 277	13.43
	26	02.091 201	12.43	40.27 43	7.29 172	39.711	22.19	31.710 262	14.02
Okt.	6	63.182	13.81 189	40.70 38 41.08 33	9.02 226	39.981	23.34 162	31.972	14.47 22
	16	63.442	15.70 233	41.08 32	11.28 272	40.224 214	24.97 205	32.216 222	14.79 19
	26	63.667 184	18.03 268	41.40	14.00 308	40.438 180	27.02 239	32.438	14.98 7
Nov.	5	03.851	20.71	41.64	17.08 332	L 40.618	29.41	32.635	15.05
	15	03.991	23.04 207	<sub>24</sub> 41.80 <sub>8</sub>	20.40	40.700	32.05 270	32.805 139	15.04 8
	24*)	04.003 42	210	4	-J-T 145	40.861 58	34.04 281	32.944 104	14.96
Dez.	4	64.125 9	29.81 302	41.88 10	27.29 345	40.919 13	37.68 278	33.048 66	14.82
	14	64.116 60	32.83 282	41.78	30.60	40.932 32	40.46 262	33.114 26	14.65 20
	24	64.056 108	35.65 254	41.61	33.07 272	40.900 77	43.08 237	33.140	14.45 21
	34	63.948	38.19	41.36	36.40	40.823	45.45	33.125	14.24
Mittl		60.687	28.87	38.80	25.05	37.328	37.43	28.248	12.18
sec δ,		1.355	-0.914		-1.931	1.205	-0.673	1.048	+0.314
a,			+9.1		+9.0		+8.8	+3.5	+8.5
Ъ,	b'	—о.оз	<b>-0.8</b> 9	<b>—0.06</b>	<b>−</b> 0.89	-0.02	-0.90	+o.or	-0.91

<sup>\*)</sup> Bei Stern 160) und 162) lies Nov. 25.

Tag		164) e	Tauri	168) α	Tauri .	171) α	Doradus	169) <b>v</b> .	Eridani
	_	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1940	0	4 <sup>h</sup> 25 <sup>m</sup>	+19° 2′	4 <sup>h</sup> 32 <sup>m</sup>	+16°23′	4 <sup>h</sup> 32 <sup>m</sup>	-55° 9′	4 <sup>h</sup> 33 <sup>m</sup>	-3° 28
Jan.	0	8.403 36	51.80 16	30.306	19.49 30	43.762 193	82.33 268	20.762	34.43 126
	10	8.367 76	51.64	20 277	10.10	43.569 251	85.01 226	20 725 3/	1 2× 60
2	20	8.291 114	51.45 21	30.206 71	TX.00	43.318 300	87.27	20.649	26.80
-	30	8.177 146	51.24 25	30.097 140	18.60 30	43.018 339	89.05 126	20.538	27.74
Febr.	9	8.031 146	50.00	29.957 165	18.30 30	42.679 368	00 2T	20 206	28.50
	,		50.99 29		31		90.31 71		30.30 57
:	19	7.862 184	50.70 32	29.792 182	17.99 31	42.311 384	91.02 16	20.232 179	39.07 36
	29	7.070 187	50.38 25	29.610 186	11.00	41.927	91.18 38	20,053	39.43 15
März	10	7.491 187	50.03	29.424	17.37	41.5/12	90.80	19.870	39.58
2	20	7-310 162	49.00	29.244	17.07 38	1 41,100	89.89	19.691	39.52 27
	30	7.147 136	49.30 33	29.080 139	16.79 22	40.818 350	88.49 187	19.527	39.25 49
Apr.	9	7.011 100	48.97 28	28.941	16.57 16	40.503 268	86.62	19.387 109	28 76
	19		48.69	28.836 65	16.41 6	40.235 212	84.33 265	19.278	38.07
	29	6.853 13	48.50 9	0 X 55T	16.35 6	40.023 151	81.68	10.207	27.16
Mai	9	6.840 13	48.41	28 757	16.41 18	20 872	78 72	19.178	36.05
	19	6.875 82	48.45	28 778 '	16.59 32	39.788 14	78.73 319	13	24 76
·	- 9			/3	32		75.54 335	19.193 59	
	29	6.957 128	48.64	28.851 119	16.91 46	39.774 55	72.19 68.76 343	19.252 103	33.30 159
	8	7.085	48.96 47	28.970	17.27	39.829 123	00.10 010	19.355	31.71 169
:	18	7.255	49.43 6T	29.130	17.90	39.952 187	W7.11	19.498	30.02 174
	28	7.402 278	50.04 72	29.328	10.07 0.	40.139	01.99 216	19.077	28.28
Juli	8	7.700 265	50.76 81	29.557 255	19.48 89	40.386 299	58.84 289	19.887 237	26.53 171
]	18	7.065	51.57 87	29.812 276	20.37 92	40.685 344	55.95 252	20.124	24.82 161
2	28	8.248	52.44 89	30.088 288	21.29 93	41.029 378	53.43 209	20.380 271	
Aug.	7	0.544	53.33 90	30.376 297	22.22 89	41.407 404	51.34 158	20.651 279	27 76 43
]	17	8.847 305	54.23 85	30.673 299	23.11 84	41.811 420	49.76	20.930 283	20 50
	27	9.152 301	55.08 79	30.972 297	23.95 74	42.231 425	48.74 42	21.213 281	19.49 72
						425			
	6	9.453 293	55.87 70	31.269 291	24.69 62	42.656	48.32	21.494 275	18.77 41
	16	9.740	56.57 59	31.560 281	25.31 49	43.075	48.54 84	21.709 265	18.36 8
0.0	26	10.028	56.57 59 57.16 47	31.841	25.80	43.470	49.38	22.034	18.28
	6	10.200	57.03 20	32.108 251	20.14 27	4.5.051 008	50.82	22.285	18.52
1	16	10.546 229	57.98 24	32.359 231	26.35 8	44.189 294	52.83 249	22.520 216	19.06 83
. 2	26	10.775	58.22	32.590 208	26.43	44.483 241	55:32 280	22.736 192	19.89 106
Nov.	5	10.080	58.36 6	32.798 181	26.39	44.724 182	58.21	22.928 165	20.95
	15	11.158 146	E8 42	32.979	20.20	44.906 118	()1.2()	23.093 135	22.19 137
2	25	11,304 111	=0	2933.130	26.07 24	45 024	64.76 337 68.18	23.228	23.56
	4	TT ATE	-0		25.83 27	15 075	68.18 342		
		13		, ,			333		173
	14	11.488 32	58.29	33·3 <sup>2</sup> 5 <sub>38</sub>	25.56 28	45.056 87	71.53 316	23.396 27	26.45 140
	24	11.520 10	58.18	33.363 4	25.28 27	44.969	74.69 288	23.423 13	27.85 131
	34	11.510	58.06	33.359	25.01	44.815	77.57	23.410	29.16
Mittl.	Ort	6.551	56.36	28.475	24.92	41.818	66.00	19.124	25.38
sec ∂, t	gδ	1.058	+0.345		+0.294	1.751	-1.437	1.002	-0.061
a, a'		+3.5	+8.1		+7.5	+1.3	+7.5	+3.0	+7.4
b, b'		+0.01	-0.92	-		0.04	-0.93	0.00	-0.93
		1000	)-		93		73	D* 40	

Ta	10	172) 53	Eridani	174) τ	Tauri	173) Grb 8	348 Caml	175) 4 Ca	ımelop.
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	4 <sup>h</sup> 35 <sup>m</sup>	-14° 25'	4 <sup>h</sup> 38 <sup>m</sup>	+22° 50′	4 <sup>h</sup> 40 <sup>m</sup>	+75° 49′	4 <sup>h</sup> 42 <sup>m</sup>	+56° 38
Jan.	0	27.460 48	23.09 173	40.341	32.11	50.30 26	70.52 258	63.021 70	70.72
	10	25 472	24.82 173	40.216	32.16	EO 04	73.10 225	62.951	72.51
	20	27.412 86 27.326 <sub>122</sub>	26.34 126	40.247 109	32.16	40 6r 43	75.35 185	62.807	74.06
		27.320 122	27.00	40.138 144	32.12 4	40.04	77.20	62.596 267	1.44
ebr.	30	27.204 <sub>153</sub>	28 57 97	20.004		48 26	77.20 137	62.390 267	75·32 76.22
enr.	9	27.051 176	20.57 68	39.994 171	32.02 18	40.30 77	78.57 84	62.329 309	, 5
	19	26.875 190	29.25 38	39.823 188	31.84 25	47.59 82	79.41 28	62.020 67.684	76.73 I
	29	26.685	29.63 6	39.635 194	31.59 31.28 38	46.77 <sub>83</sub>	79.69 28		76.83
färz	10	20.490	29.69 =	39.441	31.28	45.94 <sub>80</sub>	79.41 82	61.338 346	76.51
	20	26.299	29.45	39.251 174	30.90	45.14 74	78.59	01.002	75.80
	30	26.124 152	28.90 84	39.077 147	30.49 43	44.40 65	77.26 178	60.692 310	74.72
Apr.	0	25.972 121	28.06	38.930 113	30.06	43.75 52	75.48 215	60.425	
ipi.	9		26.05	2X XT7	30.65 41	43.23 20	73.33 243	60.214	73.33 16
	19	2= =68	26.95 138	28 745	29.65 37 29.28 29	1281 39	70.90 263	00 000	69.86
Mai	29	25.768	25.57 163	$38.719 \frac{3}{23}$	28.00	1060	68.27	59.998 71	67.02
1191	9	25.727 3	23.94 184	38.719 23	28.99 19		68.27 272	60.00=	67.92
	19	25.730 49	22.10 200	38.742 71	28.80 7	42.56	65.55 273	05	65.94
	29	25.779 93	20.10 214	38.813 118	28.73 6	42.67 28	62.82 266	60.090 161	64.00
Juni	8	25.872	17.90	38.931 162	28.70	42.95 43	60.16	60.251	02.10
	18	26.006	15.75 224	39.093 200	28.99	43.38 57	57.66 227	60.483	60.47
	28	26.178	13.51	39.293 234	29.33 46	43.95 70	55.39 199	00.780	58.98
Juli	8	26.383 232	11.32 209	39.527 262	29.79 56	44.65 81	53.40 166	61.133 401	57.73
	18	26.615 254	9.23 192	39.789 283	30.35 65	45.46	51.74 130	61.534 438	56.74
	28	26.869 270	7.31 <sub>170</sub>	40.072 298	31.00 70	16.36	50.44 90	61.972 467	=6.01
Aug.	7	27.139 <sub>280</sub>	5.61 140	40.370 307	21.70	47.33 103	49.54	62.439 486	== 62
rug.		27.110	1.21	40.677	31.70 73	48.36	10.07	62.025	FF 50
	17	27.419 285	4.21 106	40.677 311	32.43 72	40.41	49.05 8	62.925 497	
	27	27.704 284	3.15 69	40.988 309	33.15 70	49.41 106	40.97 34	63.422 499	
Sept.	6	27.988 279	2.46 28	41.297 304	33.85 64	50.47 105	49.31 76	63.921 493	56.16
	16	28.207 268	2.18 =	41.001	34.49 68	51.52 103	50.07 115	04.414	56.90
	26	28.535	2.32	41.890 281	35.07	52.55 98	51.22	04.894 <sub>467</sub>	57.89 1
Okt.	6	28.790	2.87	42.177 266	35.57	53.53 92	52.75 180	1 05.355	59.12
	16	29.027 216	3.81 129	42.443 246	35.99 34	54.45 84	54.64 220	65.789 4.34	60.57
	26	29.243 191	5.10 158	42.689 223	36.33 27	55.29	56.84 249	66,101	62.22
Nov.		29.434 163	6.68 181	42.912	36.60 22	r6.02 /+	59.33 272	00.331	64.05
.,,,,	5 15	20.507	8 40	43.108 164	36.82 18	56.64 49	62.05 288	66.864 <sup>313</sup>	66.01
		29.597 131 29.728 06	8.49	43.100 164	27.00	I 57 T2	64.93 298		68.07 2
Dez.	25 4	30 20 804	10.46 203 12.49 204	43.272 <sub>129</sub> 43.401 <sub>80</sub>	37.00 15 37.15 13	57.13 57.46 17	67.91 300	2 67.315 194 125	70.19 2
-	Т	50		1		-/			
	14	29.882 18	14.53 197	43.490 47	37.28	57.63	70.91 292	67.440 50	72.32 2
	24	29.900	16.50	43.537 2	37.39	57.63	73.83 275	67.490 26	74.37 1
	34	29.877	18.32	43.539	37.48	57.46	76.58	67.464	76.30
Mitt	1. Ort	25.859	12.13	38.392	36.74	43.34	68.73	59.746	70.84
	s, tg δ	1.033	-0.257	1.085	+0.421	4.087	+3.962	1.819	+1.520
	a'	+2.8	+7.2	+3.6	+7.0	+8.1	+6.8	+5.0	+6.6
	b'	-0.01	-0.93	+0.01	-0.94	-+0.09	-0.94	+0.03	-0.94

Ta	2.0	178) α C	amelop.	180) π <sup>5</sup>	Orionis	181) L A	urigae	183) E A	urigae
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	4 <sup>h</sup> 48 <sup>m</sup>	+66° 14'	4 <sup>h</sup> 51 <sup>m</sup>	+2°20'	4 <sup>h</sup> 53 <sup>m</sup>	+33° 4′	4 <sup>h</sup> 57 <sup>m</sup>	+43°43′
Jan.	0	8.54 11	37-54 224	9.134	29.69 103	7.109	18.74 62	42.034	68.90
	10	8.43	1 00 =8	9.115 60	28.66	7.094 66	19.36	12-01-I	20.10
	20	8.22 31	1 AT 76	9.055 98	27.74	7.028	19.88	41.935 79	F
	30	7.91 38	43.39 121	8.957	26.05	6.916	20.30 42	41.802 181	7202
Febr.	9	7.53 44	14.60	8.825	26.20	6.763 185	20.57 10	41.621 218	70 6n
		, 00 44	//	0 157	51				20
	19	7.09 47	45.37 27	8.668	25.78 36	6.578 207	20.67 6	41.403 243	73.05 10
31"	29	U.U.	45.64 22	8.493 781	25.42	0.371	20.61	41.100	73.15 19
März	10		45.42	8.300 0	25.20 6	6.155 214	20.30	40.905	72.96 47
	20	3.00	44.72	8.128	25.14 10	5.941	19.94 🚜	40.052	72.49 73
	30	5.21 45	43.58	7.959 147	25.24 27	5.742 172	19.37 68	40.416 207	71.76 94
Apr.	9	4.83 31	42.04 187	7.812 118	25.51	5.570 136	18.69 77	40.209 166	70.82
	19	4.52 23	40.17	7.694 81	25 04 43	E 121	17.92 80	40.043 116	69.70 124
	29	4.29 13	38.06 228	7 612	26.54 77	E 24T	17.12 81	39.927 60	68.46
Mai	9	4.10	35.78 237	7 572	27.31	f 208 =	16.31 77	39.867	67.14 132
	19	4.14 8	33.41 237	7.576	28.25 109	F 206	15.54 68	20.866	65.82 128
	-9		1	4/		J		59	
	29	4.22 18	31.04 229	7.623 90	29.34 123	5.368	14.86 14.28 45	39.925 119	64.54 120
Juni	8	4.40 -	28.75 216	7.713	30.57	5.481 161	14.28	40.044	63.34 107
	18	4.68	26.59	7.844 .68	31.90	5.642	13.83	40.218	62.27 02
	28	3.03 44	24.04	8.012	33.31 TAA	1 5.846	13.52 16	40.442 260	61.35 75
Juli	8	5.49 51	22.94	8.213 227	34.75	6.088 274	13.36	40.711 306	60.60
	18	6.00	21.53 108			6 262	T2 25	41.017	60.05
	28	6.00 57	20.45 75	8.440 8.600	36.18	6.362	13.35 13.48 <sub>25</sub>	41.017 337	FO 70
Aug.	7	O' O' For	19.70	8.690 266	37.55 127	6.662 300 6.980 318	13.40 25	41.354 360	FO FF
	17	7.18 64 7.82 66	19.70 40	8.956 276	38.82	7.310	13.73 37	41.714 375	59.55
	27	8.48 66	19.36 4	9.232 281	39.94 93	7.310 338 7.648 338	14.55 45	42.089 375	59.59 21
	-1		34	9.513 283	70	339		42.474 388	5.
Sept.	6	9.14 66	19.58 66	9.796 279	41.57	7.987 336	15.08 15.65 61	42.862 386	60.19 54
	16	9.80	20.24	10.075	42.01	1 0.323 . 0	15.65 61	43,-40 220	60.73 60
-	26	10.45	21.24	10.347 - (-	42.18	1 0.051 /	16.26	43.627 267	61.42 82
Okt.	6	11.07	22.50	10.609	42.08 36	0.90/ 202	16.90 66	43.994 240	62.24 94
	16	11.66 59	24.17 189	10.857 231	41.72 61	9.269 282	17.56 68	44.343 328	63.18 10
	26	T2 20	26.06	11.088 209	41.11 0.		18.24		64.23
Nov.	5	12.20 48 12.68 42	28 10	11.003 209	10.00	9.551 258	18.04 70	44.671 300	65.38 12.
		4 4 100	28.19 232	11.297 185		9.809 230	18.94 71 19.65 72	44.971 267 45.238 227	66.62
	15 25	13.10 34	30.51 248	11.482	39.32 108	10.039 196	20 27 72	45.230 227	67.92
Dez.	4*)	13.44 25 13.69 15	32.99 <sub>256</sub> 35.55 <sub>259</sub>	11.639 123 11.762 87	38.24 115 37.09 117		20.37 74 21.11 74	45.465 <sub>181</sub> 45.646 <sub>130</sub>	69.28
	4.7			"		10.392 113	74	5	
	14	13.84 5	38.14 253	11.849 48	35.92 113	10.505 65	21.85	45.776 75	70.65 135
	24	13.89	40.07	11.897 6	34.79 106	10.570	22.50 68	45.851	72.00 120
	34	13.84	43.07	11.903	33.73	10.585	23.24	45.866	73-29
Mitt	l. Ort	4.16	37.20	7.406	38.22	4.912	22.70	39.483	71.80
	S, tg 8	2.482	+2.272	1.001	+0.041	1.193	+0.651	1.384	+0.957
	a'	+6.0	+6.2	+3.1	+5.9	+3.9	+5.8	+4.3	+5.4
	b'	+0.05	-0.95	0.00	-0.96	+0.01	-0.96 =	÷0.02	-0.96

<sup>\*)</sup> Hei Stern 183) lies Dez. 5.

T.	ag	182) β C	amelop.	184) เ	Tauri	185) n	Aurigae	186) E	Leporis
1.	*6	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	4 <sup>h</sup> 58 <sup>m</sup>	+60° 21'	4 <sup>h</sup> 59 <sup>m</sup>	+21° 30′	5 <sup>h</sup> 2 <sup>m</sup>	+41° 9″	5 <sup>h</sup> 2 <sup>m</sup>	-22° 26
Jan.	0	7.87 6	24.51 203	32.324 6	15.67	20.593	15.91	56.877	72.20
ouii.	10	7.87 6	26.54 180	32.318	TE 64	20 F8T	16.08	r6 840 3/	73.39 218
	20	7.81 7.66	28.24	32.267	15.62	20.511 69	17.94 50	50.840 80	75.57 193
	30	7.44 28	28.34 <sub>152</sub> <sub>29.86 <sub>116</sub></sub>		TE E8 *	20.391 168	18.73	56.760	77.50 163
Febr.	-	7.44 28	21 02	32.172 132		20.391 168	39	56.639 156	79.13 129
1 001.	9	7.16 34	31.02 75	32.040 162	15.50 12	20.223 205	19.32	56.483 183	80.42
	19	6.82 38	31.77 <sub>32</sub>	31.878 183	15.38	20.018	19.67	56.300 203	81.35 56
	29	O.A.A.	32.09	31.695 104	15.21	19.787	19.78	56.097	81.91
März	10	0.03 -0	31.97 56	31.501	14.99	19.543	19.62	55.885	82.10
	20	5.01 26	31.41 06	31.308 181	14.72	19.300	19.21 65	55.673 201	81.91 56
	30	5.31 32	30.45 132	31.127 158	14.42 32	19.073 200	18.56	55.472 180	81.35 91
Apr.	9	4.99 26	29.13 163	30.969 126	14.10 31	18.873 162	17.71 100	55.292 152	80.44 124
100	19	4.73 19	27.50 186	30.843 88	13.79 27	18.711	16.71 112	L EE TAO	79.20 156
	29	4.54 11	25.64 202	20 755	13.52	18.596 61	15.59 118	EE.024	77.64 184
Mai	9	4.43 2	23.62	20.711	13.31	1 TX 525	14.41	54.048	75.80 208
	19	4.41 6	21.51 211	30.714 3	13.19 3	18.520	13.22	54.916 32	73.72 227
	20			20		33		51.030	
Juni	29 8	4.47	19.40 206	30.764 <sub>96</sub> 30.860 <sub>44</sub>	13.16	18.583	12.08	54.930 60	71.45 242
Juni	18	4.61 22	17.34 193		13.25 20	18.693 164	95	54.990 103	69.03 251
	28	4.83 30	15.41 175	31.001 180	13.45 32	18.857	10.06 80	55.093 144	66.52 254
Juli	8	5.13 36	13.66	31.181 215	13.77 42	19.069 256	9.26 64	55.237 180	03.90 210
Jun	0	5.49 42	12.12 128	31.396 245	14.19 51	19.325 292	8.62	55.417 213	61.50 237
	18	5.91 46	10.84	31.641 268	14.70 57	19.617 322	8.15 29	55.630 239	59.13 218
	28	0.27	9.83 70	31.909 285	15.2/ 61	19.939	7.86	55.809 261	56.95 192
Aug.	7	6.87 53	9.13 40	32.194 208	15.88 6	20.203	7.75 5	56.1306	55.03 159
	17	1.40	8.73 8	32.492 304	16.49 6.	20.043	7.80 21	50.400 286	53-44 120
	27	7.94 55	8.65	32.796 307	17.10 56	21.013 373	8.01 36	56.692 291	52.24 77
Sept.	6	8.40	8.87	33.103 304	17.66	21.386	8.37	56.983 290	ET 47
	16	9.04 55 9.58 54	9.40 81	33.407 298	10.15	$21.759 \frac{373}{367}$	8.86 61	57-273 284	ET 16
	26	9.58 54	TO 2T	33.705 289	18.56 33		0.47	57.557 275	51.33 66
Okt.	6	10.10	11.31 136	33.994 276	18.89 33	22 480 33+	TO 18	57.832 259	51.00
	16	10.59 49	12.67 130	34.270 259	19.13	22.820 340	11.00 82	58.091 240	53.10 153
	26				19.28				
Nov.		11.05 42	14.27 182	34.529 239	9	23.139 294	11.91 99	58.331 217	54.63 189
1101.	5	11.47 37	16.09 200	34.768 213	19.37 5	23.433 263	12.90	58.548 189	56.52 217
	15	11+04 21	18.09 215	34.981 184	19.42	23.696	13.97 114	58.737 155	58.69 237
Dez.	25	12.15 24	20.24	33.103 149	19.43	23.921 182	15.11 118	20,092 110	248
Dez.	5	5 12.39 16	22.48 229	635.314 111	19.42	624.103 133	16.29 121	7 59.011 78	63.54 250
	14	12.55 7	24.77 225	35·425 <sub>67</sub>	19.41	24.236 80	17.50 119	59.089 35	66.04 244
	24	12.62	27.02	35.492	19.41	24.316	18.69	59.124	08.48 228
	34	12.62	29.17	35.514	19.42	24-339	19.84	59.115	70.76
Mittl	. Ort	4.23	25.65	30.358	21.65	18.135	19.48	55.179	61.29
sec 8		2.022	+1.757	1.075	+0.394	1.328	±9.45 ±0.874	1.082	-0.413
	a'	+5.3	+5.4	+3.6	+5.2	+4.2	+5.0	+2.5	+4.9
a									

T	ag	188) β	Eridani	192) µ A	Lurigae	194) β	Orionis	193) α	Aurigae
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	5 <sup>h</sup> 4 <sup>m</sup>	-5° 9'	5 <sup>h</sup> 9 <sup>m</sup>	+38° 24′	5 <sup>h</sup> 11 <sup>m</sup>	-8° 16′	5 <sup>h</sup> 12 <sup>m</sup>	+45° 56′
Jan.	0	55.597	55.02	21.462	50.87	40.891	20.76 161	17.806	17.35
	10	EE E84 13	56.46 144	21.461	ET 80 93	40.88T	22.37	17.802 4	18.69
	20	55.528	57.74 110	21.403 109	52.64	40.828	23.81 123	17.735 126	19.90
	30	55.433 130	58.84 89	21.294 155	52.25	40.734 129	25.04	17.609 178	20.94 81
Febr.	9	55.303 157	59.73 68	21.139 193	53.80	40.605 158	26.04 75	17.431 219	21 75
	_		1		33				33
	19	55.146	60.41	20.946 218	54.24 12	40.447 178	26.79 50	17.212 250	22.30 25
M:	29	54.969 188	60.86	20.728	54.36	40.269	27.29 25	16.962 266	22.55 5
März	10	54.781 187	61.08	20.495	54.25 34	40.078	27.54	16.696 266	22.50 35
	20	54.594 178	61.08	20.261 220	53.91	39.888 182	27.53	16.430 253	22.15 64
	30	54.416 158	60.85 46	20.041 196	53.36 73	39.706 164	27.26	16.177 226	21.51 90
Apr.	9	54.258 130	60.39	19.845 160	52.63 87	39.542	26.74 76	15.951 186	20.61
	19		FO FO	19.685 116	51.76	39.406	25.08	15.765	19.51 127
	29	54.032	59.72 89 58.83	19.569 65	50.79 103	20 202	24.98	15.628 80	18.24
Mai	9	E2 07E 3/	57.73 129	19.504 11	49.76	39.238 23	23.77	15.548 21	16.87
	19	F2 06T	56.44 146	TO 402	48.73	$39.215 \frac{23}{21}$	22.35 160	TE 527	15.45
		-9		L C.				7-	
т	29	53.990 72	54.98 159	19.538 99	47.73 93	39.236 <sub>64</sub>	20.75 173	15.568 102	14.03
Juni	8	54.062	53.39 160	19.637	46.80 82	39.300	19.02 184	15.670 160	12.68
	18	54.175 151	51.70	1 19.788	45.98 69	39.405 143	17.18	15.830	11.42
T1"	28	54.326	49.95 176	1 10.080	45.29 54	39.548 177	15.29 100	16.044	10.29 96
Juli	8	54.511 213	48.19 172	20.226	44.75 39	39.725 207	13.39 184	16.305 302	9.33 79
	18	54.724 237	46.47 163	20.503	44.36	39.932 231	11.55	16.607 336	8.54
	28	54.961 255	44.84	20.808 305	44.13 8	40.163 251	0.82	$16.943 \frac{336}{362}$	7.05
Aug.	7	55.216 268	43.38 146		1405	40.414 265	8.26	17.305 381	7.56
	17	55.484 276	12 12	21.480	44.11	40.679 275	6.93	17,000	7.26
	27	55.760 279	4T TT	$21.835 \frac{355}{359}$	44.30	40.954 279	E.XX I	т8.08т 395	7 26
Q /			71		3.		/4	401	7.30 18
Sept.	6	56.039 279	40.40	22.194 360	44.61 <sub>41</sub>	41.233 279	5.14 38	18.482	7.54 35
	16	50.318	40.01	22.554	45.02	41.512	4.76 2	18.884	7.89 53
O1-4	26	50.591 26	39.96	22.900	45.53 59	41.788	4.74 =	19.281 388	8.42 68
Okt.	6	1 50,850	40.25 63	~3.2.2.34	46.12 67	42.055 256	5.09 71	19.009 373	9.10 82
	16	57.108 237	40.88 92	23.585 314	46.79 74	42.311 241	5.80 104	20.042 352	9.92
	26	57.345 217	41.80	23.899 290	47.53 <sub>82</sub>	42.552 221	6.84	20.394 326	10.89
Nov.	5	57.562	42.99	24.189	47.53 82 48.35 88	42.773	8.16	20.720	12.00 122
	15	57.754 164	44.38	24.450 226	40.02	42.970 169	9.72 <sub>171</sub>	21.013 253	13.22
	25	I 57.018	45.92	24.676	50.T7 94	43.139 136	11.43	21.266 208	14.54
Dez.	5	58.049 95	47.54 163	24.861 <sub>138</sub>	51.16 99	43·275 98	13.23 183	9 <sup>21.474</sup> 153	15.94
	14	58.144	49.17	24.000	E2 T8		15.06	21.627	
	24	58.108 54	50.76	25.086	52.20	43·373 <sub>59</sub> 43·432 <sub>16</sub>	16.84 167	21.722	17.39 18.84 142
	34	58.210	52.27	25.118	54.19	43.448	18.51	21.756	20.26
Mittl									
sec δ,		53.879	45.11	19.091	55.29	39.167	10.37	15.148	21.17
a,		1.004	-0.090		+0.793		-0.145	1.438	+1.033
b,		+3.0	+4.8	+4.I	<b>-</b> +4.4	+2.9	+4.2	$\pm 4.4$	+4.1

Ta		191) 19 H.	Camelop.	196) <del>9</del> 1	Doradus	201) γ (	Ori <b>o</b> nis	202) β	Tauri
	ig .	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	5 <sup>h</sup> 12 <sup>m</sup>	+79° 9′	5 <sup>h</sup> 13 <sup>m</sup>	-67° 14′	5 <sup>h</sup> 21 <sup>m</sup>	+6° 17′	5 <sup>h</sup> 22 <sup>m</sup>	+28° 33′
Jan.	0	46.72	60.01 284	50.83 27	85.48 310	56.478	39-93 80	21 012	24.67 38
oan.	10	46.49	62.85 260	50.56 27	88.58 273	56.488	39.93 89	31.913 <sub>16</sub> 31.929 <sub>25</sub>	25.05 38
	20	46.04 73	65 45	50.50 36	00.50 273	r6 452 33	28 25 /9	27 804 35	25.05 36
		45 20 0	65.45 225	50.20 44	91.31 228	56.453 77	27 57	31.094 83	25.41 32
Febr.	30	45.39 82	67.70 181	49.76 50	93.59 178	56.376 115 56.261 146	37·57 <sub>56</sub>	31.811	25.73 25
runi.	9	44.57 95	69.51 131	49.26 56	95.37 125	140	37.01 45	31.684 163	25.98 16
	19	43.62 105	70.82	48.70 <sub>60</sub>	96.62	56.115 169	36.56	31.521 189	26.14 4
	29	42.57	71.58 18	48.10 <sub>60</sub>	97.32	55.946 183	36.23	31.332	26.18
März	10	41.47	71.76 39	47.50 6	97.46 =	55.763 186	36.02	31.128	26.10 20
	20	40.38	71.37	46.89	97.04	55.577 <sub>178</sub>	35.91 2	30.920	25.90
	30	39.34 94	70.43	46.30 55	96.09 145	55-399 161	35.93 13	30.721 180	25.58 41
Apr.	9	38.40 81	68.98 189	45.75	94.64	55.238 135	36.06	30.541 149	25.17 .0
	19	37.59 64	07.09	45.26	92.73	55.103 102	36.33 39	30.392	24.69
	29	36.05	64.83	1 44.03	90.40	55.001 63	26.72	30.281 67	24.17 53
Mai	9	26.50	62.29 272	44.48 35	87.70 300	54.938 21	37.26 54	30.214 20	23.64 50
	19	36.25 3	59.57 282	44.21 17	84.70 323	54.917 = 22	37.93 80	30.194 29	23.14 46
	29	26.22	56.75 282	44.04 7	81.47	54.939 65	38.73	30.223 79	22.68 38
Juni	8	36.30	53.93 275	12.07	78.08 345	55.004 107	39.65 102	30.302 79	22.30 29
	18	26 78 39	51.18 259	43.97 3	74.63 345 74.63 343	55.111 144	40.67	30.427 167	22.01 <sub>18</sub>
	28	27 26	48.59 237	44.12		55.255 144	41.77	30.594 206	21.83 9
Juli	8	28.12	46.22 210	44.34 30	67.88 332	55.255 179	42.02	30.800	21.74 2
		92		_		55.434 208	42.92 115		}
	18	39.04 106	44.12	44.64 39	64.77 281	55.642	44.07 112	31.040 266	21.76
	28	40.10	42.35	45.03 46	61.96	55.875 252	45.19 105	31.306 288	21.87 18
Aug.	7	41.27 126	40.93 102	45.49 51	59.54 195	50.127 267	46.24 94	31.594 305	22.05 24
	17	42.53 132	39.91 60	40.00	57.59	56.394 276	47.18 78	31.899 315	22.29 28
	27	43.85	39.31 19	46.55 59	56.18 81	56.670 282	47.96 59	32.214 321	22.57 30
Sept.	6	45.22	39.12	47.14 59	55.37 18	56.952 284	48.55 38	32.535 323	22.87 31
	16	46.60 136	39.36	47.73	55.19	57.236 281	48.93	32.858	23.18
	26	47.90 124	40.03	48.32	55.66	57.517 275	49.07	33.179 314	23.49 20
Okt.	6	49.30	41.12	40.09	56.77 172	57.792 266	48.08	33·493 <sub>20r</sub>	23.78
	16	50.57 118	42.61 187	49.42 47	58.49 229	58.058 253	48.65 33	33.798 291	24.05 27
	26	51.75 107	44.48	49.89 40	60.78	58.311	48.T2	34.089 271	24.32 27
Nov.	5	1 F2 X2	46.69	50.29 32	62 54	I CX C/17	15.40	34.360 248	24.59 00
	15	53.74 76	49.21 277	50.61 32	66.68 341	58.761 188	1 46 74	34.608 218	24.87
	25		51.98 205	50.83	70.09 341	58.949	15 58	34.826	24.87 30 25.17 33
Dez.	5	55.07 36	54.93 306	50.95	73.64 355	59.105 120	44.57 101	35.009 141	25.50 37
	14	9 55 42		50.96	337	11 50 225		12	
	24	55.43 14	57.99 306		80.68 347	59.225 80	43.56	35.150 96 35.246 47	25.87 26.26 44
	34	55·57 9 55·48 9	61.05 <sup>299</sup> 64.04	50.87 20 50.67	83.94	59.305 <sub>36</sub> 59.341	42.57 41.65 92	35.240 47	26.70 44
					<u> </u>				
	l. Ort , tg δ	37.73	61.31	47.81	70.39	54.657	48.8I	29.787	31.08
	a'	5.321	+5.226	2.586	-2.385	1.006	+0.110	1.139	+0.544
b,		+9.9 +0.07	+4.1 −0.98	0.0 -0.03	4.0 0.98	+3.2 0.00	+3.3 -0.99	+3.8 +0.01	+3.3 -0.99
-,		,	90	5.03	<b>3.</b> 90		0.99	, 0.01	0.99

T	10	203) 17	Camelop.	206) δ	Orionis	207) α	Leporis	205) Grb	966 Caml
	- 0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	5 <sup>h</sup> 24 <sup>m</sup>	+63° o'	5 <sup>h</sup> 28 <sup>m</sup>	-0° 20′	5 <sup>h</sup> 30 <sup>m</sup>	-17°51'	5 <sup>h</sup> 31 <sup>m</sup>	+75° 0′
Jan.	0	33.67 2	68.25 224	58.160	40.90 127	6.713	61.42 213	47.88	25.74 276
	10	33.65	70.49 207	58 T7T -	42.17	6.707	63.55 191	47.8T	28.50 256
	20	33.54 21	72.56 181	58 T28 33	12 20	6.657	65.46 166	47.57	27.06
	30	33.33 28	74.37	58.063 75	11.28	6.563	67.12	47 T7	33.34 191
Febr.	9	33.05 35	75.86	57.950 146	45.08 80	6.430 164	68.47 103	46.64 64	35.25 145
	10		-6.06		0			46.00 _	36.70
	19	32.70 40	77.63 67	57.804 169	45.70	6.266	69.50 7I 70.21 26	7.	37.65
März	29 10	32.30 43	77.85	57.635 183	46.14 26 46.40 8	6.079 202	30	45.27 77	28 06
1110112	20	31.87 43	77 6T	57.452 <sub>187</sub> 57.265 <sub>181</sub>	46.48	5.877 206	70.57 2	44.50	27.02
	30	31.44 41	76.02	57.084 165		5.671 200	70.59 32 70.27 65	43.71 76	37.92 68
	30	31.03 37	76.92 109	_	46.37 28	5.471 184	03	42.95 79	37.24 118
Apr.	9	30.66	75.83 146	56.919 140	46.09 47	5.287	69.62	42.25 61	36.06 162
	19	30.34 26	74.37 175	56.779 109	45.62 64	5.128	68.67 95	41.64 50	34.44
M	29	30.08 17	72.62 198	56.670 71	44.98 82	5.001 90	07.42	41.14 37	32.44 231
Mai	9	29.91 8	70.64 212	56.599 31	44.16	4.911 49	05.89	40.77 22	30.13
	19	29.83	68.52 221	56.568	43.17	4.862 6	04.12	40.55 7	27.01 265
	29	29.83 10	66.31 221	56.580	42.03	4.856 38	62.15 214	40.48 8	24.96 269
Juni	8	29.93 10	64.10	56.634	40.76	4.894 80	00.01	40.56	22.27
	18	30.12	01.95	56.729	39.39 145	4.974	57.77 230	40.80 38	19.01
	28	30.39 24	59.92 185	50.002 168	37.94	5.095	55.47 220	41.18 52	11.07 -0
Juli	8	30.73 40	58.07 164	57.030 197	36.47	5.252 190	53.18 221	41.70 64	14.67 215
	18	31.13 47	56.43 139	57.227 223	35.02	5.442 217	50.97 206	42.34 74	12.52
	28	31.60 47	55.04 111	57.450 244	33.63	5.659 241	48.91	43.08 84	10.65 156
Aug.	7	32.11	53 93 81	57.694 259	32.36	5.000	47.06 158	43.92 90	9.09 120
	17	32.11 55 32.66 57	53.12 50	57.953	31.24 90	6.160	45.48	44.82 96	7.89 83
	27	33-23 59	52.62 18	58.223 277	30.34 65	6.432 280	44.25 85	45.78 100	7.06 45
Sept.	6	33.82 60	52.44	58.500 279	20.60	6.712 285	43.40 42	46.78 101	6.61
	16	34.42	52.57	58.779 278	29.09 <sub>38</sub> 29.31 <sub>8</sub>	0.997	42.08	47.79 102	6.57 4
	26	35.02 58	53.01 44	59.057 274	29.23 =	7.280 279	43.01 48	48.81	6.93 75
Okt.	6	35.00	53.77 106	59.33I 264	29.45 51	7.559 262	43.49 92	49.81 97	7.68
	16	36.17 53	54.83 135	59.596 253	29.96 78	7.828 254	44.41 132	50.78 91	8.83 152
	26	36.70 49	56.18 162	50.840	30.74 102	8.082	45.73 168	51.69 84	10.35 188
Nov.	5	37.19 49	57.80 186	60.085	31.76	8.318 212	47.41 197	52.53 75	12.23
	15	37.64 45	59.66 206	60.299 189	32.97	8.530 182	49.38 219	53.28 64	14.42
	25	30,02	61.72 223	00,4000	34.30		51.57 232	22.02	14.42 246 16.88 268
Dez.	5	38.32 30	63.95 233	60.646	35.71 143	8.861	53.89 236	54.43 35	19.56 283
	14	12 -3	66.00	13		14		14	
	24	38.55 38.68	66.28	60.767 82	37.14	8.971 67	56.25 232	54.78 20	22.39 289
	34	38.72	68.65 <sup>237</sup> 70.98	60.849 <sub>38</sub> 60.887	38.54 <sub>131</sub> 39.85	9.038 22 9.060	58.57 221 60.78	54.98 55.01	25.28 285 28.13
Mean	-		75.90		39.03	9.000	00.70	33.51	20123
Sen 2	Ort	29.74	71.69	56.369	31.15	4.945	50.00	41.27	29.19
a,	n's a	2-204	+1.964	1.000	-0.006	1.051	-0.322	3.866	+3.734
b,		+5.7	+3.1	+3.1	+2.7	+2.6	+2.6	<del>-</del> +8.0	+2.5
υ,		+0.02	<b>-0.</b> 99	0.00	-0.99	0.00	0.99	+0.03	-0.99

т	ag	209) د (	Orionis	212) β	Doradus	210) ε (	Orionis	211) ζ	Tauri
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	5 <sup>h</sup> 32 <sup>m</sup>	-5° 56′	5 <sup>h</sup> 33 <sup>n</sup>	-62° 31'	5 <sup>h</sup> 33 <sup>m</sup>	-1°14′	5 <sup>h</sup> 34 <sup>m</sup>	+21°6′
Jan.	0	31.562	62.25	8.87	57.51 325	11.828	29.24 133	5.406 27	19.95 6
	10	$31.573 \frac{11}{35}$	03.82	8.70	00.70	11.842 30	30.57	5.433 21	19.89
	20	21 528	05.23	0.45	03.09	11.812 73	31.76 119	5.412 69	19.87
	30	31.461	66.45 100	8.13 39	00.21	11.730	32.78 84	5.343 112	19.87
Febr.	9	31.346 115	67.45 77	7.74 45	68.26	11.628	33.62 66	5.231	19.87
	19	31.198 172	68.22	7.29 48	69.80	11.484 168	24.28	5.084 174	19.86
	29	31.026 186	68.77	6.81 49	70.80	11.316 183	24.74	4.910	19.82 4
März	10	30.840	60.07	6.32 51	$71.25 \frac{45}{10}$	11.133 188	25 07 4/	4.719 196	19.74
	20	30.649 185	60.14		71.15 63	10.945 182	35.00	4.523 191	19.62
	30	30.464 169	68.07	5.32 49 5.32 46	70.52 116	10.763 167	24.08	4.332 173	19.46
A	-	•	7				-9		
Apr.	9	30.295 146	68.57 62	4.86	69.36	10.596	34.69 49	4.159 147	19.27
	19	30.149 115	67.95 84	4.44	67.72 208	10.453	34.20 67	4.012	19.08
Mr.:	29	30.034 78	67.11	4.00	65.64 248	10.341 75	33.53 85	3.899 73	18.89
Mai	9	29.956 38	66.06	3.13 24	1 03.10 .0.	10.266 34	32.68 102	3.826 28	18.74
	19	29.918 5	64.82	3.51 16	60.35 308	10.232 7	31.66 118	3.798 -	18.63 4
	29	29.923	63.40	3.35 8	57.27 328	10.239 50	30.48 130	3.815 62	18.59
Juni	8	29.970 87	01.85 .66	3.27	53.99 339	10.289 90	29.18	3.877	18.03
	18	30.057	00.19	3.27 8	50.60 339	90	27.77	3.984 148	18.76
	28	30.183 161	58.46	3.35 17	50.60 47.18 335	10.508 163	26.29	4.132	18.97 -0
Juli	8	30.344 191	56.72	3.52 24	43.83 335	10.671 194	24.79 149	4.316 216	19.25 35
	18	30.535 218	55.01 <sub>161</sub>	3.76 31	40.65 293	10.865 219	23.30 142	4.532 243	19.60
	28	30.753 239	53.40	4.07 37	37·72 <sub>258</sub>	11.084 241	2 T XX	4.775 264	19.99 41
Aug.	7	30.992 255	51.93	4.44	35.14 215	11.325 256	20.58 113	5.039 282	20.40
-	17	31.247 268	50.66	4.86 46	32.99 163	11.581 268	10.45	5.321 293	20.01 _0
	27	31.515 275	49.65	5.32 49	31.36 103	11.849 276	18.54 66	5.614 300	21.19 33
Sont	6		/-						
Sept.	6 16	31.790 278	48.93 40	5.81 51	30.31 44 29.87 33	12.125 279	17.88 38	5.914 <sub>304</sub> 6.218	21.52 <sub>26</sub> 21.78 <sub>18</sub>
	26	32.068 278	48.53 5	6.32 51	20.00	12.404 278	17.50 7	6.522	21.96
Okt.	6	32.346 <sub>273</sub>	48.79 65	0.03	30.09 87	12.682	17.43 17.67	6 82T -22	22.05
Onc.	16	32.619 266 32.885 253		7.33 47	30.96	12.957 266	т8 эт	7.113 280	22.05 8
			49-44 97	7.80 47	32.45 208	13.223 255	02		
••	26	33.138 237	50.41	8.23 38	34.53 259	13.478 238	19.03 106	7.393 264	21.97
Nov.	5	33.375 215	51.66	0.01	37.12	13.710 218	20.09 126	7.057 212	21.84
	15	33.590 788	53.13 163	0.93	40.14 222	13.934 192	21.35	7.000	21.68
T)	25	33.778 157	54.76	9.10 16	43.4/ 252	14.126 161	22.74 147	8.110	21.50
Dez.	5	33.935 121	56.48 176	9.32 8	47.00 355	14.287 124	24.21 150	8.300 146	21.33 14
	14*)	34.056 <sub>80</sub>	58.24	9.40	50.60	14.411 85	25.71 146	8.446	21.19 10
	24	34.136 37	59.96 163	9.38	54.15 338	14.496	27.17	8.548 56	21.09 5
	34	34.173	61.59	9.26	57.53	14.538	28.54	8.604	21.04
Mittl	Ort	20.587	FT 00	6.07	12.62	TO 025	TO 22	2 405	27 75
sec δ,		29.787 1.005	51.90 —0.104	2.168	43.63	10.035 1.000	19.32 —0.022	3.405 1.072	27.75 + 0.386
a,		+2.9			-1.923 +2.3			+3.6	+2.3
b,		0.00	-0.99	-+-0.5 0.02	0.99		+2.3 -0.99	0.00	<sup>−2.3</sup> –0.99
σ,		0.00	0.99	0.02	0.99	0.00	0.99	0.00	0.99

<sup>\*)</sup> Bei Stern 211) lies Dez. 15.

Tag		215) α Columbae		216) o Aurigae		219) ζ Leporis		220) x Orionis	
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1940		5 <sup>h</sup> 37 <sup>m</sup>	$-34^{\circ}$ 6'	5 <sup>h</sup> 41 <sup>m</sup>	+49°47'	5 <sup>h</sup> 44 <sup>m</sup>	-14° 50'	5 <sup>h</sup> 44 <sup>m</sup>	-9° 41'
Jan.	0	30.381 26	30.33 278	17.793	62.52 161	15.913	45.95 206	56.363	33.10 181
	10	20 255	33.11	17.824	64.13	15.025	48.01 185	76 agr	34.91 163
	20	30.355 78	35.63 219	17.785 106	65.65 138	1 5 800 33	49.86	16 252	36.54
	30	30.151 168	37.82 180	17.679 168	67.03 117	15.812	LET AX	56.281 112	
Febr.	9	29.983 203	10.60	17.511 220	108.20	15.693	52.82 134	56.169 145	37.90 117 39.13 92
		1	130		91				,
	19	29.780 229	41.00	17.291 259	69.11 61	15.540	53.87 74	56.024 172	40.05 65
März	29	29.551 246	41.94 49	17.032 283	69.72 28	15.361 194	54.61 42	55.852 188	40.70 38
Mulz	10	29.305 251	42.43 3	16.749 292	70.00 6	15.167 201	55.03 10	55.664 194	41.08 10
	20	29.054 245	42.46	16.457 285	69.94 39	14.966	55.13 20	55.470 191	41.18
	30	28.809 229	42.05 85	16.172 264	69.55 70	14.768 184	54.93	55-279 177	41.02
Apr.	9	28.580 203	41.20 126	15.908	68.85 98	14.584 161	54.42 81	55.102	40.60 68
	19	1 28,377	39.94 164	15.081	67.87	14.423	53.61	54.947 126	39.92
	29	20.200	38.30	15.501 125	66.66	14.291 96	52.52	54.821 90	38.99
Mai	9	20.075 86	30.32	15.376 64	105.20	14.195 56	51.18 758	54.731	37.84 127
	19	27.989 40	34.03 253	15.312	63.78	14.139 15	49.60 179	54.680 10	36.47 155
	29	27.949	31.50 273	15.312	62.21	14.124 28	47.81	54.670	34.92 170
Juni	8	27.058	28.77 285	15.312 <sub>64</sub> 15.376 <sub>127</sub>	60.63 153	T4.T52	45.86 206	54 702 32	33.22 181
	18	28.015 57	25.92 290	15.503 187	59.10 146	T4.222	43.80 213	E1 776 17	31.41 188
	28	28.117	23.02 287	15.690 239	57.64 133	14.331 145	41.67 213	F4 888	29.53
Juli	8	28.263 185	20.15 275	15.929 287	56.31 118	14.476	39.54 208	77 226 140	27.63 185
	0	-00					1	-/9	
	18	28.448 220	17.40 256	16.216 328	55.13 101	14.655 206	37.46 196	55.215 207	25.78 176
Aug.	28	28.668	14.84 229		54.12 82	14.861 231	35.50 177	55.422 230	24.02 159
mug.	7	20.910	12.55	10.900 20	53.30 63	15.092 250	33.73 152	55.652 249	22.43
	17	29.192	10.63	1 -1295 408	52.67 42	15.342 264	32.21 121	55.901 263	21.06
	27	29.484 305	9.13 102	17.703 421	52.25 22	15.606 275	31.00 85	56.164 272	19.96 77
Sept.	6	29.789 312	8.11 48	18.124 430	52.03	15.881 280	30.15	56.436 278	19.19 42
	16	30.101	7.63	10.554	52.02 -	16.161	29.70 2	56.714 270	18.77
01.	26	30.415 208	7.70 62	1 10.005	52.20	16.443	29.68 41	56.993	18.73 34
Okt.	6	30.723 208	8.33	14.412	52.59 <sub>58</sub>	16.723	30.09 82	57.270	19.07
	16	31.021 280	9.50 169	19.830 401	53.17 78	16.995 261	30.91	57.541 260	19.80 108
	26	31.301 258	11.19 214	20.231	53.95	17.256	32.12	57.801 244	20.88 139
Nov.	5	31.559	13.33	20.000	54.92	17.501	33.69 185	58.045	22.27 164
	15	31.787 193	15.84 279	20.955 307	56.07 132	17.723 196	35.54 206	58.268 <sub>198</sub>	23.91 183
4.5	25	31.980 152		21.262 259	57·39 <sub>146</sub>	17.919 164	37.60 220	58.466 167	25.74 195
Dez.	5	32.132 106	21.61 304	21.521 204	58.85	18.083	39.80	58.633	27.69 199
	15	32.238	24.65			r 8 200	_	r8 762	29.68 196
	24	15 32.295 57	24.65 301	21.725 <sub>142</sub> 1621.867 <sub>73</sub>	60.42 163	18.293	42.05 222	58.852	31.64 186
	34	32.300 5	27.66 289 30.55	21.040 73	62.05 166 63.71	18.332	44.27 212 46.39	58.897	33.50
							1- 03		
Mittl. Ort		28.483	17.86	14.948	68.40	14.119	34.87	54.570	22.38
sec δ, tg δ		1.208	<b>−0.677</b>		+1.183	1.035	-0.265	1.014	-0.171
a, a'			+2.0		+1.6	+2.7	+1.4	+2.8	+1.3
b, b'		0.00	-1.00	+0.01	-1.00	0.00	-1.00	0.00	-1.00

Tag		224) a Orionis		225) δ Aurigae		227) β Aurigae		228) & Aurigae	
		AR.	Dekl	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1940		5 <sup>h</sup> 51 <sup>m</sup>	+7° 23′	5 <sup>h</sup> 54 <sup>m</sup>	+54° 16′	5 <sup>h</sup> 55 <sup>m</sup>	+44° 56′	5 <sup>h</sup> 55 <sup>m</sup>	+37° 12'
Jan.	0	F7 202	41.44 80	38.212	50.31 186	10.177	20.20	40.047	20, 40
oun.	10	57.203 57.240	40 55	28 261 49	52.17	TO 220	29.39 135	40 100	29.49 89
	20	1 ". 9	20 77		52.17 178	10 216	30.74 131	10.001	30.38 89
		57.231 54	39.10 67	38.232 106	53.95 164	10.139 77	32.05 121	40.021	31.27 84
Febr.	30	57.177 <sub>96</sub>		38.126	55.59 143	10.139 136	33.26	40.031	32.11
rent.	9	57.081 133	38.57 42	37.951 235	57.02	10.003 186	34.33 87	39.916 161	32.86 61
	19	56.948 160	38.15	37.716 281	58.17 83	9.817 225	35.20 63	39.755 197	33.47 44
	29	56.788	37.84	37.435 312	59.00 47	9.592 252	35.83	39.558	33.91 25
März	10	50.610	37.65	37.123 325	59.47 10	9.340 261	30.18	39.337 231	34.16
	20	56.423	37.56 =	30.798	59.57 28	9.076	36.25	39.106	34.20 18
	30	56.240	37.57 12	36.476 <sub>301</sub>	59.29 64	8.816	36.03 49	38.878 214	34.02 37
Apr.	9	56.069 150	37.69 23	36.175 266	58.65	8.573	35.54 74	38.664 187	33.65 55
	19	55.919 120	27.02	35.909 217	57.68 97	8.359	34.80 74	38.477	33.10 69
	29	55.799 84	28 26 34	35.692	56.43	8.186	33.84 111	38.327 106	32.41 80
Mai	9	55.715	38.72	35·533 95	54.95 165	X 002	32.73	38.221 58	31.61 <sub>87</sub>
	19	55.671 44	39.29 69	35.438 25	53.30	7.992 70	31.50 130	38.163 58	30.74 91
	29	55.667	39.98	25 412	51.55 180	7.000	30.20	28 156	29.83 90
Juni	8	FF 706 39	10.77	35.458 45	49.75 180	8.026	28.87 130	38.202	28.93 87
0 1111	18	55.700 80	41.65	35.430 113	47.05	8 120	27.57		28.06 81
	28	55.786	42.60 95	35.571 <sub>179</sub>	47.95	8.129 157 8.286 207	27.57 124	38.299 145	20.00 81
Juli	8	55.905 154		35.750 239	46.21 163	8 402	26.33 115	38.444 189	27.25 73
oun		56.059 185	43.59 100	35.989 293	44.58 150	8.493 251	25.18 103	38.633 228	26.52 64
	18	56.244 212	44.59 97	36.282	43.08	8.744 289	24.15 91	38.861 <sub>261</sub>	25.88 54
	28	56.456 234	45.56	30.022 380	41.75 113	9.033	23.24 76	39.122 290	25.34
Aug.	7	50.090	46.46 80	37.002 414	40.62	9.355 347	22.48 60	39.412	24.91
	17	56.943 266	47.26 66	37.410	39.70	9.702 -60	21.88	1 39.723 220	24.50 21
	27	57.209 276	47.92 48	37.854 457	39.00 47	10.070 383	21.43 30	40.055	24.34 15
Sept.	6	57.485 282	48.40	38.311 469	38.53 23	10.453	21.13 15	40.398 351	24.19 7
	16	57.767 285	48.67	38.780	38.30	10.844	20.98	40.749	24.12
	26	58.052	48.72	39.254 474	38.30	11.240	20.99	41.104 355	24.13
Okt.	6	58.335 278	48.55	39.120 160	38.55	1 111030 .0.	21.16	41.459 349	24.22
	16	58.613 270	48.16 60	40.193 449	39.04 73	12.025 377	21.48 49	41.808 339	24.39 26
	26	58.883	47.56 78	40.642	39.77 97	12.402	21.97 64	42.147	24.65
Nov.	5	1 50.140	46.78	1 41.000	40.74		22.61 81	42.471	25.00 .
	15	59·378 215	45.88	41.403	41.94 141	13.095 300	01	42.772 272	25.46 56 26.02 67
	25	59.593 185	44.88	41.815 301	43.35 160	13.395 259	23.42 96 24.38 110	43.044 236	26.02 6-
Dez.	5	59.778	43.83	42.116 301	44.95	13.654 210	25.48	43.280	26.69 76
	15	1959.928 109	42.79 100	12.256	46.70 184	13.864	26.71 132		27.45 85
	24	60.037 66	41.70	12.527	48.54 189	T4 OT7	28.03	43.616 <sub>88</sub>	28.30 91
	34	60.103	40.86	42.624	50.43	14.108	29.40	43.704	29.21
Arthin							-6.6-	-	1
Mittl. Ort		55.337	51.06	35.116	57.03	7.573	36.69	37.708	37.30
$\sec \delta$ , $\tan \delta$		1.008	+0.130	1.713	+1.391	1.413	+0.998	1.256	+0.759
a, a'		+3.2	+0.7	+4.9	+0.5	+4.4	+0.4	+4.1	+0.4
b, $b'$		0.00	-1.00	0.00	-1.00	0.00	-1.00	0.00	-1.00

Ta	ıg	229) η C	olumbae	232) v (	rionis	236) η Ger	ninorum	234) 22 H.	Camelop.
	-0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	5 <sup>h</sup> 57 <sup>m</sup>	-42° 48'	6 <sup>h</sup> 4 <sup>m</sup>	+14° 46′	6 <sup>h</sup> 11 <sup>m</sup>	+22° 31′	6 <sup>h</sup> 12 <sup>m</sup>	-+69° 20
Jan.		20.626	75-52	10.629	28.77 48	17.318 65	24.07 2	19.05 8	31.76 258
	10	20.601	78.66 314 288	TO 682	28.20	T7 282	24.05 6	19.13 6	34.34 252
	20	20.516	81.54 <sub>255</sub>	то 688	21.40	TE 206	24.11	19.07	36.86
	30	20.377 188	84.09 215	10.645 43	27.60 30	T7 258 30	24.22	18.90 29	39.20
Febr.	9	20.189 230	86.24	10.557 127	27.38 16	17.273 85	24.36	18.61 40	41.29
	19	19.959 262	87.95 124	10.430	27.22	17.146	24.51	18.21 47	43.04
	29	19.697 282	L XO.TO	10.273 179	27.12	16.985	24.65 9	1 17.74	44.38 8
März	10	19.415 292	80.04 /3	10.094 189	27.05 7	10.801	24.74 5	17.21	45.25
	20	10.123	00 T8	9.905 188	27.02	16.605	24.70	10.05	1562
	30	18.833 276	89.94 72	9.717	27.01 -	16.408 187	24.78 6	16.09 53	45.50 64
Apr.	9	18.557 253	89.22	9.540 156	27.03	16.221 166	24.72	15.56 49	44.88 107
_	19	18.304	88.03 161	9.384 128	27.08	16.055 136	24.61	15.07	43.81
	29	18.084	86.42	9.256 92	27.18 15	15.919 101	24.47	14.64 43	42.33 184
Mai	9	17.905	84.42	9.164 53	27.33 22	15.818 60	24.32	14.31	40.49
	19	17.771 84	82.07 264	9.111 11	27.55 28	15.758 17	24.18	14.07	38.38 231
	29	17.687 32	79.43 287	9.100 32	27.83	15.741 28	24.06	13.94	36.07 245
Juni	8	17.055	76.56 302	9.132 74	28.18 33	15.769	23.97 4	13.93	33.62 250
	18	17.675 77	73.54 210	9.200	28.61 49	15.840	$23.93 \frac{7}{1}$	14.02	31.12
	28	17.747	70.44 309	9.319	20.10	15.952	23.94	14.22	28.03
Juli	8	17.868 168	67.35 299	9.468 182	29.63 53	16.103 185	23.99 10	14.52 40	26.22 227
	18	18.036 210	64.36 281	9.650 211	30.18	16.288	24.09 12	14.92	23.95
	28	18.246	61.55 254	9.861	30.74	16.504	24.21	15.40	21.86
Aug.	7	18.494	59.01	10.095	31.2/ 17	16.745 261	24.34	15.90 62	20.00
	17	18.774	56.84 174	10.349	31.74 20	17.000	24.47 9	16.58 67	18.41
	27	19.079 326	55.10 123	10.618 280	32.13 27	17.285 292	24.56 5	17.25 71	17.12 98
Sept.	6	10.405	53.87 67	10.898 289	32.40 14	17.577	24.61	17.96	16.14, 6
	16	19.744 344	53.20 7	11.187	32.54	1 17.878	24.59 8	10.70	15.51 28
	26	20.088 344	53.13	11.480	32.53	1 10,104	24.51	19.46 76	15.23
Okt.	6	20.432	53.66	11.774	32.30	10.493	24.35	20.22	15.31 45
	16	20.767 335	54.79 169	12.065 284	32.05 44	18.800 301	24.13 28	20.97 75	15.76 8
37	26	21.086	56.48 221	12.349 272	31.61	19.101 290	23.85 31	21.71	16.59 119
Nov.	5	21.331	58.69	1 12.021	31.00 62	10.301	23.54	22.41	17.78
	15	21.043	01.33	12.077	30.43	19.005 250	23.22	23.05	19.31 .8.
70	25	21.00/ v=0	1 04.30	13.110 202	29.70	1 19.915 227	22.91	23.03 40	21.10 21
Dez.	5	22.045 126	$67.51\frac{321}{333}$	13.313 169	29.09 64	20.136 185	22.65 20	24.12 39	23.30 237
	15	22.171 69	70.84 222	13.482	28.45 58	20.321	22.45 11	24.51 28	25.67 252
	24	22.240	74.17 323	13.610 82	27.07 51	20.463	22.34	24.79 16	28.19 261
_	34	22.251	77.40	13.692	27.36	20.558	22.30	24.95	30.80
Mitt	l. Ort	18.510	63.44	8.695	38.32	15.291	33.55	14.25	39.42
sec 8	δ, tg δ	1.363	-0.927	1.034	+0.264	1.083	+0.415	2.835	+2.653
a,	a'	+1.8	+0.2	+3.4	-0.4	+3.6	-1.0	+6.6	-1.1
Ъ,	b'	0.00	-1.00	0.00	-1.00	0.00	-I.00	-0.01	-1.00

T	9.0"	240) ζ Ca	ınis ma <b>j</b> .	241) μ G	eminorum	243) β Ca	nis maj.	242) ψ1	Aurigae
	″s	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
194	40	6 <sup>h</sup> 18 <sup>m</sup>	-30° 2'	6 <sub>p</sub> 10 <sub>m</sub>	+22° 32'	6 <sup>h</sup> 20 <sup>m</sup>	-17° 55′	6 <sup>h</sup> 20 <sup>m</sup>	+49°18′
Jan.	0	2.471 25	18.91 285	21.825	36.36	5.242	40.35 234	19.424 88	65.75 159
	10	$2.496 \frac{25}{28}$	21.70	21.899 74	$36.33 \frac{3}{5}$	$5.284 \frac{42}{6}$	42.09 216	19.512 16	07.34
	20	2.468 78	1 24.40	21.920	36.38	5.278 54	44.85	19.528 56	68.92
	30	2.390	20.70	21.890	36.49	5.224 98	40.70	19.472	1 /0.45
Febr.	9	2.265 165	28.79 165	21.811 79	36.64 17	5.126	48.40	19.350 182	71.85 140
	19	2.100	30.44 125	21.689 156	36.81 <sub>16</sub>	4.989 169	49.73 100	то.т68	73.05
	29	1.002	31.69 84	21.533 181	36.97	4.820 191	50.73 66	10.930	74.00 66
März	10	1.082	32.53 41	21.352	37.10 8	4.629 203	51.39 33	18.673 284	74.66
	20	1.449 235	32.04	21.157	37.18 2	4.426 204	$51.72 \frac{33}{2}$	18.389 .00	75.00 34
	30	1.214 226	32.92	20.960 188	37.20 3	4.222	51.70 34	18.101 276	75.01 31
Apr.	9	0.988	32.48 84	20.772 168	37.17	4.025 180	51.36 67	17.825 249	74.70
-	19	0.781 182	31.64	20.604 141	37.10 7	3.845	50.69 98	17.570	7408
	29	0.599 148	30.42	20.463 106	26.08	3.690 123	49.71 125	17.364 165	73.19 113
Mai	9	0.451	20.05 .0.	20.357 66	36.85	3.567 88	48.46	17.199 109	72.00
	19	0.341 68	26.96 217	20.291 24	36.71 12	3.479 48	46.94 175	17.090 50	70.75
	29	0.273 25	24.79 240	20.267	36.59	3.431 7	45.19 195	17.040	60.31
Juni	8	0.248 $\frac{25}{20}$	22.39	20.287	36.50 6	$3.424 \frac{7}{34}$	43.24	17.051 72	67.78 156
	18	0.268 63	19.83	20.351	36.44 2	3,458 34	41.16	17.123 131	00.22
	28	0.331	17.10 260	20.450	36.42	3.531 110	38.99 220	17.254 186	64.67
Juli	8	0.436	14.47 264	20.599 178	36.45 5	3.641	36.79 217	17.440 236	63.18
	18	0.580	11.83 251	20.777	36.50 8	3.786	34.62 207	17.676	61.76
	28	0.759 311	9.32	20.986 235	36.58	3.963	32.55	l 17.056 .	60.46
Aug.	7	0.970	7.03	21.221	36.66	4.168	30.66	18.274	59.29 102
	17	1.209 262	5.02	21.477	36.73 4	4.396 248	29.01 135	10.020 220	58.27 86
	27	1.471 280	3.38	21.752 288	36.77 r	4.644 263	27.66 99	19.004 400	57.41 <sub>68</sub>
Sept.	6	1.751 293	2.17 72	22.040 299	36.76	4.907 276	26.67	19.404 415	56.73 51
·	16	2.044	1.45 19	22.339	36.69	5.183	26.10	19.810	56.22
	26	2.347 305	1.26 34	1 22.045	36.54 22	5.466 287	25.96 32	20.244	55.91 12
Okt.	6	2.052	1.60 88	22.955 200	36.32 28	5.753 282	26.28	20.074 428	55.79 8
	16	2.955 295	2.48 140	23.264 304	36.04 34	6.038 280	27.05 121	21.102 421	55.87 30
	26	3.250 280	3.88 186	23.568	35.70	6.318 267	28.26	21.523 406	56.17
Nov.	5	3.530 250	5.74 227	23.003 270	35.33 37	0.585	29.86	21.929 282	56.68 73
	15	3.789 220	8.01	24.142	34.90	0.835	31.79 218	22.312	57.41 95
	25	4.019	10.01	24.400	34.61	7.002	33.97 227	22.663	58.36
Dez.	5	4.214	13.43 295	24.628 193	34.30 24	7.258 160	36.34 246	22.971 258	59.51 133
	15	4.368 107	16.38	24.821 151	34.06	7.418 117	38.80	23.229 198	60.84 148
	25	4.475 -	19.35 201	24.972	33.9I	7.535	41.27	23.427	62.32
	34	<sup>26</sup> 4.531	22.26	<sup>26</sup> 25.076	33.86	26 7.607	43.67	<sup>26</sup> 23.558	63.90
Mittl		0.511	7.90	19.802	46.20	3.378	29.54	16.670	74.80
sec δ,		1.155	-o.578		-+o.415		-0.323		+1.163
a,	a'	+2.3	-1.6	+3.6	-1.7	+2.6	-1.8	+4.6	-1.8
b, i	b'	0.00	-1.00	0.00	-1.00	0.00	1.00	-0.01	-1.00

T	ag	244) 8 ε M	lonocerotis	245) α (	Carinae	246) 10 M	onocerotis	247) 8	Lyncis
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	6 <sup>h</sup> 20 <sup>m</sup>	+4° 37′	6 <sup>h</sup> 22 <sup>m</sup>	-52° 39'	6 <sup>h</sup> 24 <sup>m</sup>	-4° 43'	6 <sup>h</sup> 32 <sup>m</sup>	+61°31'
Jan.	0	37.126 62	19.39 113	39.675	54.48 348	61.560	35.40 168	16.22	61.90 220
	IO	27.180	T8.26	20 654	1 57.00	6T 620	27 OX	16.33	64.10
	20	27.204	77.07 99	39.561 93	61.21	6x 622	28 60 TJ	16.35	66.31 213
	30	37.172	16.42	39.401	64.15 256	61.508	20.04	16.28 7	68.44 195
Febr.	9	37.095 116	15.73 69	39.179 274	66.71 211	61.519 79	41.06	16.11 25	70.39 169
	19	36.979 148		38.905 316	68.82	61.400 150	41.06	15.86 32	72.08
	29	36.831 171	14.82	38.589 346	70.46	61.250	42.62	15.54 37	72.45
März	IO	36.660 183	T4 58 24	38.243 362	71.59 60	61.077 185	12.06 44	15.17 39	74.44
	20	36.477 <sub>185</sub>	T4.48		72.TO	60.892 189	43.27		75 OT 5/
	30	36.292	14.51 16	37.516 365 37.516 356	$72.26 \frac{7}{44}$	60.703 181	43.25 23	14.37 39	$75.14 \frac{13}{30}$
Apr.	9	36.115 160	T4 67	37.160	71.82	60.522 165	43.02	13.98 37	7484
	19	35.955 135	14.06	36.825 335	70.87 95	60.357	12.58 44	13.61 37	74 12
	29	35.820 135	T5.27	36.523 302	69.45 186		41 02	13.29 26	72.01
Mai	9	1 25 717	TE OT	36.261 213	67.59 226	60.105	41.00	13.03 19	77 58 143
	19	35.650 27	16.57	36.048 159	65.33 261	60.030 75	40.06	12.84 11	69.87
	29	35.623	TT 24	35.889 100	62.72 288	57			
Juni	8	35.635	17.34 <sub>87</sub> 18.21	35.789 <sub>40</sub>	50.84	59·993 <sub>2</sub> 59·995 <sub>43</sub>	38.87	12.73 3	67.94 <sub>208</sub> 65.86 <sub>217</sub>
	18	35.687	то т8	25 740	59.84 309	60.037	37.53	12.70 5	62.60 217
	28		20.20	35.749 <sub>21</sub> 35.770 <sub>81</sub>	56.75 322	60.116	36.09 152	12.75 13	63.69 219
Juli	8	35.777 126	21.26 106	35.851 140	53.53 325	60.231 148	34.57	13.08 20	61.50 215
		35.903 158			50.28 325		33.02		59.35 208
	18	36.061 187	22.32 101	35.991 195	47.08 305	60.379	31.48 147	13.36	57.27 195
À	28	36.248 212	23.33 94	36.186	44.03 280	1 00.550	30.01	13.70	55.32 179
Aug.	7	36.460 233	24.27 82	30.431	41.23 246	00.758	28.00	14.09	53.53 158
	17	30.693	25.09 65	30.721 330	38.77 201	00.083	27.48 95	14.54	51.95 136
	27	36.943 263	25.74 45	37.051 362	36.73 153	01.220	26.53 68	15.03 52	50.59 111
Sept.	6	37.206 273	26.19 23	37.413 385	35.20 <sub>96</sub>	61.483 269	25.85 38	15.55	49.48 85
	16	37.479 287	26.42	37.798	34.24 35	61.752	25.47 <sub>5</sub>	16.09	48.63
(VI-e	26	37.760 284	26.40 28	38.198	33.89 =	02.029	25.42 30	10.00	48.08 25
Okt.	6	38.044 283	26.12	38.604 401	34.18	62.310	25.72 64	17.23	47.83 6
	16	38.327 279	<sup>25.59</sup> 76	39.005 387	35.11	62.590 277	26.36 96	17.01 56	47.89 38
**	26	38.606	24.83 96	39·392 <sub>361</sub>	36.66	62.867 267	27.32 125	18.37	48.27
Nov.	5	38.870	23.87	39.753	38.79	03.134	28.57	10.92	48.97
	15	39.131 225	22.75	40.079	41.41	03.387	30.05 166	19.44	50.00 133
T)	25	39.300 208	1 41.54 720 1	40.350 224	44.44 333	03.019	31.71 178	19.91 42	51.33 162
Dez.	5	39.574 174	20.23	40.583 163	47.77 351	63.824 172	33.49 183	20.33 35	52.95 187
	15	39.748	18.93	40.746	51.28 54.86 358	63.996	35·32 <sub>180</sub>	20.68 26	54.82 206
	25	39.883	17.67	40.84I 22	34.00 252	64.128 88	37.12	20.94 18	56.88
	34	39.974	16.50	40.864	58.39	64.216	38.84	21.12	59.08
Mittl.	. Ort	35.264	29.77	37.145	43.66	59.721	24.82	12.64	71.59
sec δ,	tg δ	1.003	+0.081		-1.311		-0.083	2.098	+1.845
a,	a'	+3.2	-1.8	-	-2.0	U	-2.2	+5.5	-2.8
Ъ,	b'	0.00	-1.00	~	-1.00		0.99	-0.02	-0.99

m		249) ξ² Ca	nis maj.	251) γ Ge	minorum	250) 51	Aurigae	252) v	Puppis
Ta	ıg	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	6h 32m	-22° 54'	6 <sup>h</sup> 34 <sup>m</sup>	+16° 26′	6 <sup>h</sup> 34 <sup>m</sup>	+39° 26′	6 <sup>h</sup> 35 <sup>m</sup>	-43° 8′
Jan.	0	34.332 50	68.23 262	16.681	57.30	32.458 101	34.22	57.677 24	12.51
oun.	10	24.282	70.85 243	76 766 03	56.86 44		35.20 98	FF FOT	42.54 45.88 314
	20	34.381 50	73.28 218	16.800	56.53 33	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	36.25 106	662	10.00
		24 221	75.46 189	76 -00	56.33 22	32.591 23	27 21	57.665 98	00
Febr.	30	34-331 97	77.25	16.703 64	56.31 13	32.574 83	37.31 101 38.32 01	57.565 153	
rebi.	9	34-234 138	77·35 <sub>156</sub>	16.719 108	)	32.491 136	30.32 91	57-412 201	54.39 211
	19	34.096 172	78.91	16.611	56.13	32.355 180	39.23 77	57-211 239	56.50 167
300	<b>2</b> 9	33-924 196	80.12 83	10.408	56.13	32.175 212	40.00 58	56.972 268	58.17 119
März	10	33.728 210	80.95 46	16.299 185	56.17 7	31.963 232	40.58 37	56.704 286	59.36 70
	20	33.518 214	81.41 8	16.114 100	56.24 7	31.731 238	40.95	56.418 291	60.06 22
	30	33-304 209	81.49 28	15.924 183	56.31 8	31.493 231	41.09 9	56.127 286	60.28 28
Apr.	9	33.095 193	81.21 65	15.741 168	56.39	31.262 212	41.00	55.841 269	60.00 76
	19	32.902 169	80.56	15.573 142	56.48	31.050 182	40.68	55.572 243	59.24 120
	29	32.733 140	79.57 131	15.430	56.58 12	30.868	40.16	55.329 209	58.04 162
Mai	9	32.593 104	78.26 161	15.319 75	56.70	30.725 98	39.47 83	55.120 169	56.41 202
	19	32.489 66	76.65 186	15.244 35	56.85	30.627 49	38.64 94	54.951 125	54.39 235
	29	22.422		TT 200		20 578		= 4 8 2 6	52.04 263
Juni	8	22 208	74.79 207	15.214	57.04 23	20 580	37.70 100	=1 ===	49.41 285
ouni	18		72.72 224	TE 06T 4/	57.27 27	30.500 53	36.70 103		46.56 298
	28	32.414 56	70.48 235		57.54 31	30.633 102	35.67 104	54.724 24	13.58 298
Juli	8	32.470 95	68.13 239	15.347 123	57.85 34	30.735 148	34.63 101	54.748 74	43.58 305
oun	0	32.565 132	65.74 236	15.470 157	58.19 35	30.883 190	33.62 97	54.822 122	40.53 3or
	18	32.697 165	63.38 226	15.627 187	58.54	31.073 229	32.65 90	54.944 167	37.52 290
	28	32.862 105	61.12	15.814	50.00 21	31.302 262	31.75 84	55.111 208	34.62 260
Aug.	7	33.057	59.04 184	10.028	59.19 25	31.564 200	30.91 76	55.319 245	31.93 238
	17	33.278 244	57.20	10.204	59.44 18	31.854	30.15 68	55.564 278	29.55 von
	27	33.522 263	55.69 113	16.519 271	59.62 7	32.169 333	29.47 59	55.842 305	27.56 153
Sept.	6	33-785 277	54.56	16.790 283	59.69	32.502	28.88 51	56.147 226	26.03 100
	16	34.062 287	53.86	17.073	59.64	32.851 260	28.37 42	50.473	25.03 42
	26	34.349 293	53.64 27	17.364	59.45 32	33.211 367	27.05	50.814 240	24.61 18
Okt.	6	34.642 294	53.91 76	17.662 300	59.13 45	33.578 369	27.63 32	57.163 349	24.79 80
	16	34.936 289	54.67 123	17.962 297	58.68 45	33.947 366	27.42 9	57.512 341	25.59 139
	26	35.225 279	55.90 167	18.259 291	58.11 66	34.313 357	27 22	57.853 326	26.98 194
Nov.	5	35.504 262	57.57 205	L TX.550	57.45 71	34.670	27 28	58.179 300	28.92 244
	15	35.766 238	50.62	T8.827	56.74	34.670 340 35.010 317	07 57	58.479 267	31.36 283
	25	36.004 208	59.62 235 61.07	18.827	56.74 73 56.01 73	35.020 317	27.93	58.746 225	34.19 313
Dez.	-3 5	36.212 170	61.97 <sub>256</sub> 64.53 <sub>268</sub>	19.086 232 19.318 199	55.29 66	35.327 <sub>283</sub> 35.610 <sub>242</sub>	28.46 53	58.971 176	37-32 333
	_						00		
	15	36.382 127	67.21	19.517 159	54.63 58	35.852 193	29.14 83	59.147 121 59.268 61	40.65 341
	25 34	36.509 80 36.589	69.93 267	19.676	54.05 49 53.56	36.045 137 3°36.182	29.97 <sub>96</sub> 30.93	3°59.329 61	44.06 <sub>338</sub> 47.44
		0-3-3		-7.19		0	10 70	33.0-3	1
	. Ort	32.420	57.68	14.740	67.84	30.110	44.5I	55-433	32.36
sec 8		1.086	-0.423	1.043	+0.295	1.295	+0.823	1.371	-0.937
a,		+2.5	-2.8	+3.5	-3.0	+4.2	<i>−</i> 3.0	+1.8	-3-1
ъ,	0	0.00	-0.99	0.00	0.99	-0.01	-0.99	+0.01	-0.99

Tε	15	248) 23 H.	Camelop.	253) S Mor	nocerotis	254) ε Gei	ninorum	256) ξ Ge:	minorum
* 10	18	AR.	Dekl.	AR.	Dekl.	AR.	Dekl	AR.	Dekl.
19	40	6 <sup>h</sup> 35 <sup>m</sup>	+79°37′	6 <sup>h</sup> 37 <sup>m</sup>	+9° 56′	6 <sup>h</sup> 4c <sup>m</sup>	+25°11'	6 <sup>h</sup> 41 <sup>m</sup>	+12°57′
Jan.	0*)	° 70.54	54.68 296	°42.273 82	59.47 85	16.486	21.57 10	57.197 00	32.10 68
	10	70.72	57.64 292	12 256	58.62	176 582 90	21.67	1 57 287 90	31.42 56
	20	70.67	60.56 280	12 200	57.00	T6 625 T	21.86 28	57 227	
	30	70.07 30	63.36	40 275	57.21	T6 6T4	22.14 32	E7.216	30.43 30
Febr.	9	60.84	65.91 221	42.313 <sub>104</sub>	56.86	16.552 109	22.46 34	57.257 <sub>101</sub>	30.13 20
_ 0.02.	9	74			33		34		
	19	69.10	68.12	42.209 139	56.53 21	16.443	22.80	57.156	29.93 11
	29	68.19 103	69.89	42.070	56.32	10.290	23.13 28	57.019 165	29.82 4
März	10	67.16	71.10 73	41.905 180	56.21 2	16.119 101	23.41 21	56.854 181	29.78
	20	66.05	71.89 16	41.725 185	56.19	15.925	23.62	56.673 186	29.81
	30	64.90	72.05 40	41.540 180	56.24 13	15.725 195	23.76 5	56.487 182	29.88
Apr.	9	63.78 106	71.65	41.360 165	56.37	15.530 179	23.81 4	56.305 168	30.00
1	19	62.72	70.71	41.195 142	56.57	15.351 179	23.77	56.137 145	30.15 20
	29	61.78 94	69.26 188	41.053 112	56.84	15.197 122	23.66		30.35 25
Mai	9	60.00	67.38 225	40.04T	57.TO 33	TEOFE	23.49 20	EE 878 114	30.60 29
	19	60.24	65.13 254	10.864	57.6T	T4.002	23.29 23	55.708	30.89 35
	-9	44		39	30	14.992 42	_	33.790 42	
_	29	59.90	62.59 275	40.825	58.11	14.950	23.06	55.756 2	31.24 40
Juni	8	59.67 2	59.84 288	40.826	58.68 63	14.951	22.82	55.754 38	31.64
	18	59.65 18	56.96 293	40.866	59.31 <sub>68</sub>	14.995 86	22.59	55.792 76	32.10
	28	59.83	54.03	40.945	59.99 70	15.081	22.37	55.868	32.59 51
Juli	8	60.22	51.13 280	41.059 148	60.69 71	15.206 161	22.17	55.981 146	33.10 52
	18	60.81	48.33 264	41.207	61.40 68	15.367 193	22.00	56.127 176	33.62 49
	28	61.58 77	45.69 242	41.384 203	62.08	15.560 222	21.83 16	56.303 203	24.TT
Aug.	7	62.51	43.27 215	41.587 226	62.71	15.782 247	21.67	56.506 226	34.56 45
	17	63.58 119	41.12	41.813 244	63.24	10.029	21.50 20	56.732 245	34.94 26
	27	64.77	39.28 149	42.057 261	63.64 40	16.296 284	21.30 23	56.977 262	35.20 14
Sept.	6				63.89	16.580 298	_		_
~opt.	16	66.07	37.79 111 36.68	42.318 42.591 <sub>282</sub>	$63.96 \frac{7}{12}$	16.878 208	21.07	57.239 <sub>275</sub>	35.34 2
	26	67.44 143	25.08	42.591 282	63.83	17.186	20.80 32 20.48 37	57.514 <sub>285</sub>	35.32 19
Okt.	6	68.87	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	42.873 289	63.50	17 FOT 315	20.11 41	57·799 <sub>291</sub>	35.13 36
	16	70.32 145 71.77 142	25 88 1/	43.162 <sub>291</sub> 43.453 <sub>289</sub>	62.07	T7.820 319	19.70 41	58.090 295 58.385 294	34·77 53 34·24 68
	• •				71	31/			
	26	73.19 136	36.49 106	43.742 283	62.26 86	18.137 310	19.27 43	58.679 289	33.56 80
Nov.	5	74.55	37.55	44.025	61.40	10.447 208	18.84	58.968	32.76 80
	15	75.82	39.04	44.296	60.42	18.745	18.43	59.244 259	31.87
T)	25	76.97 98	40.94 226	44.548	59.37	19.024 252	10.00	59.503 234	30.94
Dez.	5	77.95 80	43.20 257	44.775 195	58.30 105	19.276	17.80 17	59·737 <sub>201</sub>	30.00 90
	15	78.75	45-77 280	44.970 156	57.25	19.493 176	17.63	59.938 163	29.10 83
	25	79.34	48.57	45.126	56.26	19.669	$17.56 \frac{7}{6}$	60.101 118	28.27 73
	34	3° 79.68 34	51.51	3145.238	55.36	19.796	17.62	3160.219	27.54
Mitt	l. Ort		61.22		70 T2	TA 446	an er	EE 202	12 87
	$\delta$ , tg $\delta$	61.85	64.32	40.385	70.13	14.446	32.31	55.292 1.026	42.87
	a'	5.558	+5.467	1.015	o.175	1.105	+0.470		+0.230
b,		+10.3 0.06	-3.I -0.99	+3.3	-3·3 -2·20	+3.7	<i>-</i> 3.5 <i>-</i> 0.98	+3.4	-3.6 -0.98
0,		0.00	-0.99	0.00	-0.99	-0.01	0.90	E 4	

<sup>\*)</sup> Bei Stern 254) und 256) lies Jan. 1.

T	ag	257) α Car	nis maj. 1)	258) 18 Mo	onocerotis	262) α	Pictoris	261) & Ge	minorum
	ъ	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	6 <sup>h</sup> 42 <sup>m</sup>	-16°37′		+2° 28′	6 <sup>h</sup> 47 <sup>m</sup>	-61° 52'	6 <sup>h</sup> 48 <sup>m</sup>	+34° 1′
Jan.	I	32.170 62	68.99 237	45.740 85	34.94 133	37.76 2	44.45 368	52.307 113	56.55 63
	10	32.232 12	171.30	45.025 26	33.61 133	<sup>3</sup> 37·74 <sub>10</sub>	48.13	52.420	57.18
	20	22 244	73.56	$45.861 \frac{30}{13}$	32.43 101	37.64 20	51.63 325	52.475	57.90
	30	32.207 82	75.53	45.848	31.42 83	37.44 27	54.88 290	52.471 61	58.69 79
Febr.	9	32.125	77.23	45.789 101	30.59 65	37.17 34	57.78 249	52.410	59.48 76
	19	32.001	78.63 108	45.688	29.94 47	36.83	60.27 202	52.297 156	60.24
	29	31.844	79.71 76	45.553 162	29.47 31	36.43	02.29	52.141 -0-	60.01
März	IO	31.662	1.80.47	45.391 178	29.16	35.98 47	1 03.02	51.952 210	01.47
	20	31.465 202	80.89 10	45.213 184	29.02	35.51 48	64.82 46	51.742 219	01.87
	30	31.263	80.99 = 22	45.029 180	29.04 16	35.03 48	65.28 43	51.523 216	62.10 5
Apr.	9	31.066	80.77	44.849 166	29.20 30	34.55 46	65.20	51.307 199	62.15
	19	30.883	80.23	44.683	29.50 45	34.00	64.59 111	51.108	62.03
	29	30.723 131	79.40	44.538 117	29.95 57	33.00 20	63.48	1 50.034	01.74
Mai	9	30.592 98	78.29	44.421 83	30.52 71	33.27 22	61.88	50.793 100	01.31
	19	30.494 60	76.92	44.338 47	31.23 83	32.94 27	59.84 243	50.693 56	60.77 64
	29	30.434 21	75-33 177	44.291 9	32.06	32.67 21	57.41 276	50.637 10	60.13 69
Juni	8	30.413 18	73.50	44.282 30	32.99	32.46	54.65	50.627	59.44 72
	18	30.431	71.63	44.312 67	34.01	32.33 5	51.03	50.664 82	58.7I
	28	30.488	69.61	44.379	35.08	32.28 -	48.42	50.746	57.90
Juli	8	30.583 129	67.55 204	44.482	36.19	32.30 10	45.12 330	50.871 165	57.21 72
	18	30.712 161	65.51	44.617 164	37.30 106	32.40 17	41.82	51.036 200	56.49 69
	28	30.873	63.56 180	44.781	38.36 97	32.57	38.61 301	51.236 233	55.80 67
Aug.	7	31.002	01.70	44.973	39.33 84	32.81	35.60	51.469 260	55.13 63
	17	31.270	60.19 129	45.187	40.17 67	33.12 27	32.89	51.729 284	54.50
	27	31.511 254	58.90 94	45.421 251	40.84 45	33.49 42	30.57 185	52.013 304	53.90 57
Sept.	6	31.765 268	57.96	45.672 264	41.29 21	33.91 46	28.72 129	52.317 321	53.33 54
	16	32.033	57.41 13	45.936	41.50	34.37	27.43 68	52.638	52.70
	26	32.312 285	57.28 31	40.211 282	41.45 33	34.86 50 35.36 51	26.75	52.971 342	52.20 46
Okt.	6	32.597	57.59 76	46.493 286	41.12 60	35.36 <sub>51</sub>	26.71 62	53.313	51.02
	16	32.884 284	58.35 119	46.779 285	40.52 86	35.87 49	27.34 128	53.660 347	51.41 34
	26	33.168 276	59.54 158	47.064 280	39.66	36.36	28.62	54.007	51.07 25
Nov.	5	33.444 261	01.12	47.344 269	38.57 127	36.83 43	30.52 245	54.3400	50.82
	15	33.705 240	03.03	47.612	37.30 140	37.26 43	32.97	54.676 309	50.68 T
	25	33.945 212	105.21	47.002	35.90 148	37.63 <sub>30</sub>	35.89 329	54.985 280	50.67 13
Dez.	5	34.157	67.58 247	48.087 195	34.42	37.93 22	39.18 329	55.265 243	50.80 29
	15	34.334 136	70.05 248	48.282	32.93 146	38.15	42.72 267	55.508 199	51.09 44
	25	34.470 gi	72.53 242	48.438	31.47	38.28	46.39 370	55.707	51.53 58
	34	<sup>32</sup> 34.561	74.95	<sup>32</sup> 48.550	30.11	<sup>33</sup> 38.33 <sup>5</sup>	50.09	3455.854	52.11
Mittl	Ort	30.292	58.35	43.888	45.65	34.54	35.48	50.126	67.73
sec δ,			-0.299		+0.043	2.121	-1.871	1.207	+0.675
a,		+2.7	-3.7		-3.9	+0.6	4·I	<b>⊹4.</b> 0	-4.2
ъ,		0.00	-0.98		-0.98	+0.03	-0.98	-0.01	_0.98
,		0.00	0.90		<b>0.</b> 90	, 0.03	0.90	0.01	0.90

<sup>1)</sup> Ort des Hauptsterns; die jährliche Parallaxe (0."371) ist bereits berücksichtigt.

1940	T	ag	266) & Ca	inis maj.	265) 15 I	Lyncis m	268) ε Ca	nis maj.	269) ζ Ge:	minorum
Jan. I 1 25.939 8	-		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
20	19	40	6 <sup>h</sup> 51 <sup>m</sup>	-11° 57′	6 <sup>h</sup> 52 <sup>m</sup>	+58° 29′	6 <sup>h</sup> 56 <sup>m</sup>	-28° 53′	7 <sup>h</sup> 0 <sup>m</sup>	+20° 39′
20	Jan.	1	25.939 0-	54.04	8.367	62.39	18.014	31.01	34.992	24.60
20		10	426.019	56.19	8.518 61	04.42	18.083 16	33.95 278	6 25 TO6 TT	24.36 11
Febr. 9 25.966 to 7 61.50 to 7 8.432 to 7 70.50 to 75 175 175 173 to 73 to 73 to 73 to 74		20	20.050	58.18	8.579	66.50	. 0	36.73	25 168	24.25
19		30	26.021	59.96	8.549	68.55	-0 -6-	39.28	25.177	24.26
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Febr.		25.966	61.50	8.432	70.50		41.53	25.T24 T3	24.37
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									9-	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		-	25.859 143		8.230 263	72.25 148	17.840	43.44	35.044 129	24.54 22
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	März		25.710		7.973 314	73.73 115	17.009 199	44.98 113	34.915 161	24.70
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Maiz		25-540 186		7.659 349		17.470 218		34.754 181	25.00 22
Apr. 9			25.360 193		1 7.310 -		17.252 227		34.573 191	25.22
Mai		30	25.107 190	64.98 =	361	70.03	_	47.10	34.382 190	25.42 16
Mai	Apr.	9	24.9770	64.82	6.585 220	75.98	16.800	47.06	34.192	25.58
Mai 9 24.509 99 62.73 117 5.691 133 73.53 146 16.228 133 44.24 159 33.736 94 25.81 16.228 133 44.28 159 33.695 128 25.78 16.228 133 42.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 33.636 56 25.83 189 24.432 112 25.84 15.954 67 15.943 15 38.80 234 33.585 12 25.84 189 24.467 119 53.26 184 5.584 215 50.6444 2.88 15.954 67 33.97 2.66 33.651 101 25.86 151 142 177 5.809 28 40.633 18 16.221 105 31.41 25.86 151 142 177 5.809 28 40.633 189 16.268 175 26.38 232 34.056 197 25.89 189 17 25.120 2.66 46.56 119 40.43 188 16.268 175 27 25.346 245 45.37 89 7.243 461 53.36 129 16.882 257 20.23 136 34.475 24.25.79 27 25.346 245 45.37 89 7.243 461 53.36 129 16.882 257 20.23 136 34.475 24.25.99 16.26 26.26 28.84 44.85 4 16.26 26.405 28.8 44.45 4 16.26 26.26 28.8 44.45 4 16.26 26.26 28.8 44.45 4 16.26 26.26 28.8 44.45 18.10 26.26 26.405 28.8 44.71 105 26.876 24.966 26 18.009 3.8 17.05 66 35.857 39 22.75 15.00 16.20 16.20 17.139 27.154 11 35.554 303 24.475 1.60 18.10		19	24.799	64.20	6.246 339		16.587	46.56	34.015	25.69 8
19		29	24.641	62 68	5.944 252	74.70	16.304	45.67	22 8 5 8	25.77
19	Mai	9	24.500	62.73	5.691	73.53	16.228	44.42	33,730	25.81 4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		19	24 410	61.56	5.498 126	72.07	16.095	42.83 180	22 626	
18		20								
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Juni			50.17		68 50		28 80 214	33.560 17	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Ouni			50.00 170		66.50		36.60 234	33.503 24	
Simple   Simple   Simple   Sing			24-332 50	50.90 180	5.335 90	64.44	~~	30.40 249	33.507 64	25.05 1
Aug. 7	Juli		24.302 85	55.10 184	5.425 159	62.26		33.97 256		25.00
Aug. 7	- 1111	0		53.20 184			105		-3-	
Aug. 7			24.586	51.42	5.809 284	60.33 105	16.126	28.85	33.888 168	25.89
7		28	24.737	49.65 164	0.003	50.30 181	10.208	20.38	34.056	25.89
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Aug.	7	24.910	48.0I		50.54 .60	10.443	24.00	34.253	25.86
Sept. 6   25.591   260   44.48   54   43.94   15   43.94   15   43.94   15   43.94   15   43.94   15   43.94   15   43.95   15   44.05   66   44.71   105   29.75   529   29.75   529   29.75		17	25.120	40.50	1 0.010 427	54.86	10.640	21.98	34.475	25.79 12
Sept. 6   $25.591   260   44.48   54   43.94   15   8.193   510   50.20   17.139   277   17.64   291   17.96   42   35.262   292   25.14   26.124   281   43.79   26   26.405   286   44.05   66   26.691   285   44.71   105   9.758   529   49.40   26.691   285   44.71   105   9.758   529   49.40   26.691   285   44.71   105   9.758   529   49.40   26.691   285   44.71   105   9.758   529   49.40   26.691   285   44.71   105   9.758   529   49.40   26.691   285   27.256   267   48.90   197   15.50.87   11.300   461   11.761   415   51.49   130   19.408   232   25.69   273   27.793   24.255   28.340   18.81   52.23   28.340   18.81   23.81   23.01  $		27	25.346 245	45.37 89	7.243 461	53.36	16.882	20.23 136	34.719 263	25.66
Okt. $\begin{array}{cccccccccccccccccccccccccccccccccccc$	Sept.	6		11.18				18.87	34.082	25.45
Okt. 6   26.405   286   44.05   66   66   66   66   66   66   66			25.851	12 04 54	8,103	51.01	17.416		35.262	25.14
Nov. $\begin{array}{cccccccccccccccccccccccccccccccccccc$		26	26.124	12 70	8.703	50.20	17.707	T7 54	35.554	24.74
Nov. $\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Okt.	6	26.405	44.05	0.227	10 66 54	18.000	17 6c	35.857	24.25
Nov. $\begin{array}{cccccccccccccccccccccccccccccccccccc$		16	26.601	44.7T	9.758	40.40	18.317	18.30	36.166	23.66 59
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		-6	285		529	3				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Non		26.976 280	45.76	10.287 518	49.45 36	18.023 290	19.47 166	30.477 308	23.00 69
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	210V.		27.250 -6-	47.18	10.005		18.922 285	21.13 210	30.705 200	22.31 72
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			27.523 250	48.90	111.300	50.49 100	19.207	23.23 246	37.084 284	21.59 60
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Doz		-1.113 221	50.87 214	1 11.701	51.49 130	19.408 232	25.09 273		20.90 63
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	DOZ.	5	27.997 191	53.01 223	12.176 356	52.79 157	19.700	28.42		20.27 54
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		15	28.188	55.24		54.36	19.894	31.33 200	37.856	19.73 43
Mittl. Ort see $\delta$ , tg $\delta$ 24.081			28.340	57.49	12.817	56.16	20.044	34.32	38.046	19.30
Mittl. Ort sec $\delta$ , tg $\delta$ 1.022 -0.212 1.914 +1.632 1.142 -0.552 1.069 +0.377   b, b' 0.00 -0.97 -0.02 -0.97 +0.01 -0.97 33.041 36.07   16.013 21.37 33.041 36.07   1.142 -0.552 1.069 +0.377   1.24.24 -4.9 +3.6 -5.2   1.24.24 -4.9 +3.6 -5.2   1.24.24 -0.97 +0.01 -0.97 -0.01 -0.97   1.25.25   1.26.27   1.			28.448	59.68	13.021	58.14	3520.145	37.29	3638.190	19.00
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Mitti	Ort	2100-	,				1	22.047	26.07
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	sec 8	tes		-						
b, b'   0.00   -0.97   -0.02   -0.97   +0.01   -0.97   -0.01   -0.97					1000				,	
0.97										
*) Bei Stern 268) und 269) lie3 Dez. 35.						-0.97	1 10.01	0.97		

<sup>\*)</sup> Bei Stern 268) und 269) lies Dez. 35.

		271) γ Ca	nis ma <b>j</b> .	273) δ Ca	nis maj.	274) 63 1	Aurigae	277) λ Ger	ninorum
Ta	ag 	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
194	40	7 <sup>h</sup> 1 <sup>m</sup>	-15°32'	7 <sup>h</sup> 5 <sup>m</sup>	-26°17′	7 <sup>h</sup> 7 <sup>m</sup>	+39°24′	7 <sup>h</sup> 14 <sup>m</sup>	+16°38′
Jan.	I	4.461 87	45.9I 236	59.019 82	57.67 287	34.092 142	60.85 91	1040.605 125	49.16
<b>V</b>	10	6 4.548 36	48.27 221	8 59.101 30	60.54 272	24 224	61.76	10 720	48.62 54
	20	4.584 = 13	50.48 199	$59.131 \frac{33}{23}$	63.26 249	34.313 15	62.79 111	40.730 74	48.24 25
	30	4.571 <sub>61</sub>	52.47 174	59.108 74	65.75 221	$34.328 \frac{13}{47}$	63.90	40.826 =	47.99 11
Febr.	9	4.510 105	54.21 146	59.034 119	67.96 189	34.281 47	65.02 107	40.796 77	47.88
	19	4.405 141	55.67 115	58.915	69.85	34.177 154	66.09 98	40.719 118	47.88
	29	4.264 768	56.82 84	58.758 187	71.38 115	34.023	67.07 83	40.601	47.97
März	IO	4.096 188	57.66	58.571	72.53 76	33.830 219	67.90 63	40.452	48.11
	20	3.908 196	58.18 20	58.364 217	73.29 36	33.611 233	68.53	40.280	48.29 20
	30	3.712 195	58.38	58.147 217	73.65	33.378 233	68.94 19	40.096 185	48,49 21
Apr.	9	3.517 185	58.27 41	57.930 207	73.63 42	33.145 220	69.13	39.911	48.70 20
	19	3.332 165	57.86 70	57.723 189	73.21 79	32.925 198	69.08 28	39.736 1/3	48.90 19
	29	3.167 140	57.16 99	57.534 163	72.42	32.727 165	68.80	39.579 132	49.09 19
Mai	9	3.027 109	56.17 123	57.371 132	71.28 146	32.562 125	68.31 66	39.447 100	49.28 19
	19	2.918 75	54.94 147	57·239 <sub>97</sub>	69.82	32.437 <sub>81</sub>	67.65 81	39.347 66	49.47 20
	29	2.843 38	53.47 166	57.142	68.07 201	32.356 33	66.84	39.281 28	49.67 20
Juni	8	2.805	51.81 183	57.083 19	00.00	$32.323 \frac{1}{15}$	65.91 101	39.253 11	49.87 21
	18	2.805 38	49.98 193	57.064 20	63.85 235	32.338 63	64.90	39.264 48	50.08 22
	28	2.843 74	48.05 199	57.084 60	61.50	32.401	63.83	39.312 85	50.30 22
Juli	8	2.917 109	46.06 198	57.144 97	59.06 244	32.510 151	62.74 110	39.397 118	50.52 21
	18	3.026 140	44.08 193	57.241 132	56.62 237	32.661	61.64 109	39.515 151	50.73 17
	28	3.166	42.15	57.373 166	54.25 223	32.853	60.55	39.666	50.90 13
Aug.	7	3.336	40.36	57.539 196	52.02	33.081	59.50	39.845 204	51.03 6
	17	3.533 221	38.77 133	57.735 223	50.01	33.340 287	58.49 97	40.049 228	51.09 3
	27	3.754 241	37·44 <sub>101</sub>	57.958 247	48.31 134	33.627 311	57·52 91	40.277 248	51.06
Sept.	6	3.995 258	36.43 <sub>64</sub>	58.205 267	46.97 90	33.938 332	56.61 84	40.525 266	50.91 27
	16	4.253 272	35.79 22	58.472 284	46.07 43	34.270	55.77 76	40.791 280	50.04
	26	4.526 282	35.57 20	58.756 296	45.64 8	34.619 261	55.01 68	41.071	50.23
Okt.	6	4.809 280	35.77 64	59.052	45.72 60	34.980 370	54.33 57	41.364	49.00 68
	16	5.098 289	36.41 107	59.355 304	46.32	35.350 374	53.76 45	41.005 305	49.00 79
	26	5.387 286	37.48 146	59.659 299	47.43 158	35.724 371	53.31 29	41.970 305	48.21 88
Nov.	5	5.673	38.94 180	1 59.958 00	49.01	1 36.005	53.02	42.275 200	47.33
	15	5.940 256	40.74 208	60.244 267	51.02 237	30.455 212	52.89 6	42.574 285	46.40 04
	25	0.204 222	42.82 229	1 00.511 228	53.39 264	36.797 315	52.95 26	42.859 264	45.46 91
Dez.	5	6.436 199	45.11 240	60.749 204	56.03 282	37.112 278	53.21 46	12 722	44.55 83
	15	6.635 160	47.51 <sub>244</sub>	60.953 161	58.85 290	37.390 231	53.67 66	43-357 198	43.72 73
	25	6.795	49.95 239	61.114	61.75 289	37.621	54.33 84	43.555 154	42.99 60
	35	6.910	52.34	61.227	64.64	37.799	55.17	43.709	42.39
	tl. Ort		35.84	57.045	48.28	31.837	73.17	38.716	60.90
	$\delta$ , tg $\delta$	1.038	-0.278	1.115	-0.494	1.294	+0.822	1.044	+0.299
	a'	-1-2.7	-5.3	+2.4	-5.7	+4.I	-5.8	+3.5	-6.4
b.	. b'	0.00	-0.96	+0.01	-0.96	-0.02	<b>−0.96</b>	-o.or	-0.95

T	ag	278) π	Puppis	279) δ Ge	minorum	281) δ V	olantis	280) 19 I	yncis <i>sq</i>
1.0	u.s	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	7 <sup>h</sup> 15 <sup>m</sup>	-36° 59′	7 <sup>h</sup> 16 <sup>m</sup>	+22° 5′	7 <sup>h</sup> 16 <sup>m</sup>	-67° 50'	7 <sup>h</sup> 17 <sup>m</sup>	+55° 23′
Jan.	1	3.524 83	27.34 328	34.368	28.09 20	55.97 2	57.11 378	61.538 188	34.78 179
	10*)	2 607	30.62 316	34.500	27.89 5	10 56.00 - 8	100.00	61.726	36.57 192
	20	2 627	30.62 316 33.78 293	34.579 25	$27.84 - \frac{5}{9}$	55.92 20	64.59 350	61.831 19	38.49 196
	30	2 508 33	36.71 <sub>264</sub>	$34.579 \frac{25}{34.604}$	27.93	55.72 30	68.09 350	6- 9-0	40.45 193
Febr.	9	3.599 89	30.35	24 576	28.12 28	55.42	71.31 286	61.786	42.38 180
	7		39.35 230	''		55.42 39			
	19	3.370 181	41.65 191	34.499 119	28.40 32	55.03 46	74.17	61.645 209	44.18 160
***	29	3.189 215	43.50	34.380	20.14	54.57 53	76.61 197	01.430	45.78 134
März	10	2.974 238	45.04 104	34.226	29.05 22	54.04 28	78.58	01.172	47.12
	20	2.730	46.08 58	34.050	29.37	53.46	80.05	1 00.870	48.13 65
	30	2.485 252	46.66	33.861	29.65 23	52.86 <sub>60</sub>	80.99 41	60.546 329	48.78 26
Apr.	9	2.233 243	46.79	33.670 182	29.88	52.26 60	81.40	60.217 317	49.04 12
	19	1.990 227	1 . (	33.488 163	30.05 10	51.66	81.27		48.02
	29	1.763 201	45.71 <sub>118</sub>	33.325	20.TE	51.66 58 51.08 53	80.61	290	48.43 85
Mai	9	1.562 169	44.53	33.188	20.20	50.55 47	79.44 165	59.010 <sub>251</sub> 59.359 <sub>201</sub>	47.58 115
	19	1.393	42.96	33.083 68	20.2T	50.08 47	77.79 208	59.158	46.43 142
	- )	1			3				
	29	1.260	41.04 223	33.015 30	30.18 6	49.67 34	75.71 248	59.014 82	45.01 163
Juni	8	1.168	38.81	32.985	30.12 8	49.33 2	73.23 270	58.932 18	43.38 170
	18	1.117 7	30.34 265	32.994 49	30.04	49.08	70.44	58.914 47	41.59 ror
	28	1.110 37	33.09 277	33.043 86	29.95	48.92	07.40	58.961 109	39.08 197
Juli	8	1.147 80	30.92 280	33.129 122	29.84	48.85 2	64.19 328	59.070 170	37.71 198
	18	1.227 120	28.12 274	33.251	29.72	48.87 12	60.91 326	59.240 225	35.73 196
	28	1.347 160	45.50 -	33.405 184	29.58 18	48.99 22	57.65 320	59.465	33.77 189
Aug.	7	1.507 196	22.78	33.589 211	20.40	49.21	54.52 291	50.742	31.88 180
	17	1.703 229	20.41 206	33.800 235	20.18	49.52 39	51.61 258	1 00.005	30.08 166
	27	1.932 259	18.35 166	34.035 256	28.89 36	49.91 46	49.03 214	60.430 400	28.42 151
Sept.	6		16.69 118		28 52		1	60.820	
I.c.	16	2.191 285	15.09 118	34.291 274	28.53 45	50.37 53	46.89 164	60.830 61.262 457	26.91 <sub>133</sub> <sub>25.58 <sub>112</sub></sub>
	26	2.476	15.51 66 14.85 10	34.565 289	28.08 45	50.90 57	45.25 106	61.710 457	21.16
Okt.	6	2.781 305	TARE	34.854 302	27.55 62	51.47 61	44.19 43	61.719 457	22 57
	16	3.101 330	14.75 48	35.156 312	26.93 69	52.08 63	43.76	62.195 489	23.57 63 22.94 36
	10	3.431 332	15.23 106	35.400 316	26.24 75	52.71 62	43.99 90	62.684 489	3-
	26	3.763 326	16.29 162	35.784 316	25.49 77	53.33 59	44.89 155	63.179 492	22.58 6
Nov.	5	4.089	17.91 211	30.100	24.12	53.92 56 54.48 49	40.44	05.071	22.52 26
	15	4.401	20.02	30.410 206	1 ~3.93 77	54.48	48.58	041170	22.78 58
40	25	4.091 258	22.56	36.706	1 22.22	54.97	51.25	04.004	22.78 <sub>58</sub> 23.36 <sub>90</sub>
Dez.	5	4.949 218	25.44 312	36.980 244	22.56	55.38 41	54.36 311	65.021 368	24.26 90
	15	5.167 170	28.56	37.224 207	22.01	55.70 22	57.80 <sub>366</sub>	65.389 308	25.46
	25	5-337 117	31.83 327	37.431 162	21.60 41	55.92 10	61.46	65.697 236	26.93
	35	5.454	35.11	37.593	21.33	56.02	65.21 375	65.933	28.64
Mitt	l. Ort	-				MY 5 1			18 71
sec 2	tg 8	1.366	18.98	32.434	40.17	51.94	50.62	58.696	48.14
	a'	1.252	-0.753 $-6.4$	1.079	+0.406	2.652	-2.456	1.761	+1.449
b,		+2.I +0.00		+3.6	-6.6	0.0	-6.6	+4.9	-6.7
.,	-	+0.02	0.95	-0.01	-0.94	+0.05	-0.94	-0.03	-0.94

<sup>\*)</sup> Bei Stern 280) lies Jan. 11.

T:	ag	282) t Ger	minorum	285) β Ca	nis min.	284) Grb 1	308 Caml	286) p Ger	minorum
	~~ 	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	7 <sup>h</sup> 22 <sup>m</sup>	+27°54′	7 <sup>h</sup> 23 <sup>m</sup>	+8° 24′	7 <sup>h</sup> 24 <sup>m</sup>	+68°34′	7 <sup>h</sup> 25 <sup>m</sup>	+31°53′
Jan.	I	2.098 144	55.94 15	55.648	30.88	43 31 27	73-96 240	17.291	66.91
	II	2,242 00	56.09	て アファ	1.20.XT	43.58	70.30	L T7.444	66.91 67.30 67.86 67
	20	0.220	50.30	EE 850	28.89 92	43.71	1 70.00 a	T7 520 93	67.86
	30	2 262	56.82 53	55.880 -	28.T4	43.72	81.46	T7 575 -	68.53 76
Febr.	9	2 228 ***	57.35 53	EE 857	27.56	43.61 23	83.95 231	17 554	69.29 79
		′		~ 7	4.			/-	
	19	2.262	57.92 58	55.788 110	27.15 27	43.38 34	86.26	17.478	70.08 76
	29	2.141 158	50.50	55.678 141	26.88	43.04 42	00.31 ,60	17.354 162	70.04
März	10	1.983	59.05	55.537 164	26.75	42.62 49	89.99 127	17.192 189	71.55 60
	20	1.800	59.53 20	55.373	26.74	42.13 52	91.26 81	17.003	72.15 47
	30	1.602 200	59.92 27	55.196 178	26.83	41.61 53	92.07 31	16.798 208	72.62 32
Apr.	9	1.402	60.19	55.018 171	27.01 26	41.08 52	92.38 18	16.590 200	72.94 15
•	19	1 210	60.34 3	54.847 156	27.27	40.56 49	92.20 65	10.300	73.09
	29	1.037 147	$60.37 \frac{3}{8}$	54.691 133	27.61	40.07 43	91.55	16.208	73.08
Mai	9	0.800	60.29 18	54.558 103	28.01	39.64 36	90.45 149		72.92
	19	0.775 77	60.11 27	54.455 71	28.48	39.28 28	88.96 184	15.930 83	72.62 42
				-	23			-3	
<b>.</b> .	29	0.698 37	59.84 34	54.384 36	29.01	39.00 18	87.12	15.847	72.20 71.68 52
Juni	8	0.661	59.50 34	54.348	29.60 63	38.82	85.00 235	15.805	71.68 59
	18	0.665	59.11	54.348 36	30.23 66	38.73	82.05	15.805 42	71.09 65
	28	0.709 84	58.08	54.384 71	30.89 67	38.74	00.10	15.847 84	70.44 68
Juli	8	0.793 122	58.22 48	54.455 103	31.56 66	38.85 21	77.58 260	15.931 122	69.76 7=
	18	0.915 155	57·74 <sub>50</sub>	54.558 135	32.22	39.06	74.98 256	16.053 158	69.04 74
	28	1.070 188	57.24 53	54.693 162	22.84	39.36 38	72.42 247	16.211	68.30 74 67.55
Aug.	7	1.258 216	50.7I	54.855 188	22.20	34.74	69.95 234	16.403 221	
0	17	1.474 241	56.16 58	55.043 212	33.84 43	40.20 53	67.61 215	16.624	00.70 _0
	27	1.715 264	55.58 63	55.255 233	24 14	40.73 53	65.46	16.873 272	66.00 78
a .									
Sept.	6	1.979 284	54.95 65	55.488 250	34.28	41.32 64	63.54 166	17.145 293	65.22
	16	2.263 300	54.30 69	55.738 267	34.22	41.96 68	61.88	17.438 293	04.43 8
01.1	26	2.503 315	53.61 73	56.005 280	33.95 49	42.64 71	60.52	1 17.750	63.63 78
Okt.	6	2.0/0 225	32.00 72	56.285 290	33.46	43.35 74	59.48 67	10.0/0	62.85 76
	16	3.203 323	52.15 73	56.575 296	32.75 90	44.09 74	58.81 28	344	62.09 72
	26	3.534 332	51.42 70	56.871 297	31.85 108	44.83 74	58.53	18.758	61.37 63
Nov.	5	3.000	50.72 64	57.168 291	30.77	45.57	58.65	19.104 340	60.74 54
	15	4.192 312	1 50.08	57.459 279	20.56	45.57 71 46.28 68	59.18	19.444 006	
	25	4.504 291	49.54 41	1 57.738	28.26	1 40.CO	60.13	19.770 304	59.80 24
Dez.	5	4.795 260	49.13 26	57.998 233	26.93	47.58 54	61.48 135 172	20.074 273	59.56 6
	15	5.055 222	48.87 10	58.231	25.62	48.12	63.20	20.347	59.50
	25	5.277 175	48.77 7	58.428	24.38 113	40.57 24	65.25 231	20.580 185	59.62 32
	35	5.452	40.04	58.583	23.25	48.91	67.56	20.765	59.94
Mittl	l. Ort	0.109	68.52	53.819	42.29	39.22	87.99	15.251	79.85
	, tg δ	1.132	-+0.530	1.011	+0.148	2.740	+2.551	1.178	+0.623
a,		+3.7	-7.0	+3.3	-7.2	<b>+6.3</b>	-7.2	+3.8	-7.3
<i>b</i> ,		0.01	_0.94	0.00	-0.93	-0.06	-0.93	-0.02	-0.93

ıp,	ag	287) α Gen	ninorum¹)	289) 25 M	onocerotis	291) α Cai	nis min.2)	292) 24	Lyncis
	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	7 <sup>h</sup> 30 <sup>m</sup>	+32° 0′	7 <sup>h</sup> 34 <sup>m</sup>	-3° 58′	7 <sup>h</sup> 36 <sup>m</sup>	+5° 22'	7 <sup>h</sup> 37 <sup>m</sup>	+58° 50′
Jan.	I	48.422	65.93 37	19.468	42.84 183	11.548 131	36.32	59.359 234	56.05 189
	11	48.580 101	66.30 55 66.85 67	19.595	44.67 768	II.679 ga	35.01 116	59 593 145	57.94 205
	20	48.681	66.85 67	1519.675 29	46.35	1511.762 33	33.85	<sup>16</sup> 59.738 51	59.99 21-
	30	48.722	07.52	19.704	47.85 128	11.795 18	32.88	59.789	62.14
Febr.	9	48.706 71	68.27 80	19.684 66	49.13 105	11.777 64	32.09 79 59	59.748 128	64.28 205
	19	48.635 120	69.07	19.618	50.18 83	11.713 105	31.50 42	59.620 206	66.33 186
	29	48.515	09.80	19.511	51.01 59	11.608 137	31.08	59.414 271	08.19
März	10	48.355 -0-	70.59 62	19.373 -6-	51.60 36	11.471 161	30.83	59.143 218	69.79 128
	20	48.168	71.22	19.212	51.96	11.310	30.73	58.825	71.07 90
	30	47.964 209	71.72 34	19.036 179	52.10 7	11.135 178	30.76	58.475 362	71.97 49
Apr.	9	47.755 <sub>201</sub>	72.06 18	18.857	52.03 26	10.957 173	30.91 26	58.113 355	72.46
	19	47.554 185	72.24	18.083	51.77 46	10.784	31.17 35	57.758 334	72.53 34
	29	47.369	72.25 -	18.523	51.31 64	10.626	31.52 45	57.424 297	72.10 73
Mai	9	47.210	72.11	18.384	50.67 8r	10.490 109	31.97 53	57.127 248	71.46
	19	47.084 89	71.82 41	18.271 82	49.86 96	10.381 78	32.50 62	56.879 191	70.37
	29	46.995 48	71.41 <sub>51</sub>	18.189 50	48.90 109	10.303 45	33.12 68	56.688 128	68.96 167
Juni	8	46.947 6	70.90 60	18.139	47.81	10.258	33.80 73	56.560 60	67.29 180
	18	46.941 36	70.30 67	18.124	46.61 128	10.249 26	34.53 77	56.500	65.40 204
	28	46.977 76	69.63	18.143	45.33 132	10.275 59	35.30 78	56.509	03.30
Juli	8	47.053 116	68.92	18.195 86	44.01 133	10.334 92	36.08 77	56.586	61.21
	18	47.169 152	68.17	18.281 116	42.68 128	10.426	36.85	56.729 205	59.00 221
	28	47.321 185	07.40	18.397	41.40	10.549	37.57 63	56.934	56.79 217
Aug.	7	47.506 215	66.60 81	18.542	40.21	10.700	38.20 53	57.198	54.62 210
	17	47.721	65.79 82	10.714	39.17 86	10.878	38.73 37	5/-510 26.	52.52 108
	27	47.964 268	64.96 84	18.910 219	38.31 <sub>61</sub>	11.079 223	39.10 18	57.883 410	50.54 183
Sept.	6	48.232 289	64.12 85	19.120 239	37.70 33	11.302 242	39.28	58.293 448	48.71 164
	16	48.521	63.27 0.	19.308	37.37	11.544 250	39.24 28	58.741 481	47.07
	26	40.030	62.42 8.	19.624	37.35 =	11.803	38.96	59.222 508	45.65 118
Okt.	6	49.154	01.57 82	19.890 282	37.67 65	12.077	38.43	59.730	44.47 gr
	16	49.490 341	60.75 77	20.179 290	38.32 97	12.362 292	37.66	60.257 538	43.56 59
3.7	26	49.834 346	59.98 <sub>69</sub>	20.469 293	39.29 127	12.654	36.66	60.795 541	42.97 26
Nov.	5	50.180 342	59.29 59	20.762	40.56	12.940	35.46	01.330 431	42.71
	15		50.70	21.040	42.09	13.230 280	34.09 147	500	42.80
70	25	50.851 329	58.25 29	21.320 2.0	43.82	13.518 <sub>261</sub>	32.02	02.370	43.25 82
Dez.	5	51.158 278	57.96 10	21.584 231	45.69 193	13.779 235	31.08 154	62.850 474	44.07 117
	15	51.436 238	57.86	21.815 196	47.62	14.014 200	29.54 148	63.274 361	45.24 150
	25	51.674	57.95 28	22.011	49.56 187	14.214 159	28.06	63.635 286	46.74
-	35	51.864	58.23	22.167	51.43	14-373	26.69	63.921	48.51
Mittl		46.398	79.12	17.659	32.44	9.742	47.67	56.429	70.91
sec δ,		1.179	+0.625	1.002	-0.069	1.004	+0.094	1.933	+1.655
a,		+3.8	<b>−</b> 7.7 °	+3.0	-8.0	+3.2	-8.2	+5.1	8.3
b,	b'	-0.02	-0.92	0.00	-0.92	0.00	-c.91	-0.05	-0.91
	1) 0-4	des helleren Sto							

Ort des helleren Sterns.
 Ort des hellen Sterns; die jährliche Parallaxe (o"312) ist bereits berücksichtigt.

Та	a o	294) x Ge	minorum	295) β Gem	ninorum¹)	297) ζ	Volantis	296) π Ge	minorum
10	ag	AR,	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	7 <sup>h</sup> 40 <sup>m</sup>	+24° 32′	7 <sup>h</sup> 41 <sup>m</sup>	+28° 10′	7 <sup>h</sup> 42 <sup>m</sup>	-72°27'	7 <sup>h</sup> 43 <sup>m</sup>	+33° 33
Jan.	I	51.530 160	23.69 12	40.736 163	8.50 <sub>10</sub>	39.33 10	48.20 380	40.444	38.95
	II	51.690 106	23.57 5	40.899	8.60 28	39.43 5		40 610	39.37 6
	20	1651.796 51	23.62	41.006	1 0.00	39.38	52.00 378 55.78 365	10 726	39.98
	30	FT 847	23.83	41.057	0.31	39.20	59.43	40.702	10.74
Febr.	9	51.842 5	24.17 44	41.050 7	9.86 64	39.20 38.88 44	62.87 344	40.790 3	41.60
	19	51.786	24.61		10.50 66		66.01 68.78 277	40.721	42.51
	29	51.684 141	24.61 49	40.990 40.883	11.16 64	38.44 <sub>53</sub>	68.78 277	40.621	12.40
März	10	51.504 141	25.10 50 25.60 48	40.003 146	TT 80 64	37.91 <sub>63</sub>	71.12 234	40.469 183	43.42 8
111012	20	51.543 168	26.08 48	40.737 176	11.80 64	37.28 69	72.00	40.409 183	44.27
		51.375 185	26.00 43	40.561 193	12.39 50	36.59 74	72.99 136	40.286	45.02 6
	30	51.190 191	26.51 43	40.368 199	12.89 39	35.85 75	74.35 84	40.083 210	45.63
Apr.	9	50.999 186	26.87 27	40.169 194	13.28 26	35.10 34.35 74	75.19 30	39.873 206	46.08
	19	50.813	27.14 18	39.975 179	13.54	34-35 74	75.49 23	39.667	46.35
	29	50.641	27.32 8	39.796	13.68	33.01	75.26 76	39.476	46.43
Mai	9	50.491 120	27.40	39.640	13.68	32.90 <sub>65</sub>	74.50 126	39.309 136	46.33
	19	50.371 87	27.40 8	39.513 91	13.57 22	32.25 58	73.24 174	39.173 100	46.06
	29	50.284 51	27.32	39.422	13.35 32	31.67 31.18 49	71.50 216	39.073 61	45.64
Juni	8	50.233	27.17	39.368 54	13.03	31.18	69.34	39.012	45.10
	18	50.221 26	26.97	$39.354 \frac{14}{25}$	12.04	20 78 40	00.80	38.993 = 23	44.44 7
	28	50.247 64	20.72	39.379 64	12.19	30.78 30	03.90	39.016 64	43.70 8
Juli	8	50.311 99	26.43 33	39.443 101	11.69 55	30.29 7	60.89 307	39.080	42.89 8
	18	50.410 132	26.10	39.544 136	11.14 59	30.22 6	57.68 325	39.183 140	12.02
	28	50.542 164	1 43.13 40	39.680 167	10.55 63	30.28	54.43 319	39.323 174	41.12
Aug.	7	50.706 193	25.31	39.847 198	9.92 67	30.45 30	51.24 304	39.497 206	10.18
	17	50.899	24.84 <sup>47</sup> 24.37 53	40.045 225	9.25 71	30.75 40	48.20 277	39.703 236	20.22
	27	51.118 242	24.31 61	40.270 249	8.54 76	31.15 40	45.43 240	39.939 <sub>261</sub>	39.22 9
Sept.	6	51.360 265	23.70 68	40.519 272	7.78 81	31.66 60	43.03 194	40,200	37.25 10
	16	51.625 283	23.02 75	40.791 291	6.97 85	32.26 67	41.09 139	40.486 307	36.25
	26	ET 008	22.27 82	41.082 308	6.12 88	32.93 73	20 70	40.793 307	25 25
Okt.	6	52.208	21.45 87	L 4T 200	5.24 90	33.66 76	28.00	41.117 340	24 27
	16	52.522 314	20.58 91	41.711 331	4.34 89	34·42 78	$38.76 \frac{14}{53}$	41.457 350	33.33 8
	26		10.67	33^		,	23		
Nov.		52.844 327	19.67	42.042	3.45 85	35.20 35.95 71	39.29 118	41.807 354	32.45
1101.	5	53.171 324	18.76 87	44.3/1 222	2.60 79	35.95 71	40.47 181	42.161 351	31.67 6
	15	1 23.493 214	17.89 81	42.709 222	1.01 68	36.66 65	42.28	44.514 242	31.01 5
Dez.	25 5	53.809 296 54.105 269	17.08 70 16.38 70	43.031 303	1.13 54	37.31 56 37.87 44	44.67 <sub>287</sub> 47.54 <sub>326</sub>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	30.50 33
		1		43.334 275	0.59 37				
	15	54.374 234	15.82	43.609 238	0.22	38.31 32	50.80	43.469 254	30.07
	25	54.608 189	15.43 22	43.847 193	0.03	38.63 19	54.36 372 58.08	43.723 207	30.18
	35	54.797	15.21	44.040	0.04	38.82	58.08	43.930	30.50
	l. Ort	49.637	36.73	38.802	21.84	34.31	44.08	38.443	52.79
	$tg \delta$	1.099	+0.457	1.134	-+o.536	3.319	3.164	1.200	+0.664
a,		+3.6	-8.5	+3.7	-8.6	-0.7	-8.7	+3.9	-8.8
<i>b</i> ,		-0.01	-0.90	-0.02	-0.90	+0.09	-0.90	-0.02	-0.90

<sup>1)</sup> Die jährliche Parallaxe (o"ror) ist bereits berücksichtigt.

Ta	or	300) Grb:	1374 Caml	303) χ C	arinae	305) χ Go	minorum	306) <b>ζ</b>	Puppis
10	8	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
194	0	7 <sup>h</sup> 53 <sup>m</sup>	+74° 4′	7 <sup>h</sup> 55 <sup>m</sup>	-52°49′	7 <sup>h</sup> 59 <sup>m</sup>	+27°57′	8 <sup>h</sup> 1 <sup>m</sup>	-39°49′
Jan.	r	8.02 42	36.59 251	17.884	18.61 371	52.007 184	36.85	30.678	64.75 68.18 343
	11		39.10 269	18.014 56	22.32 368	52.191 129	36.86	20 818	68.18 343
	20*)	8.69 9	41.79	TX 070	20.00	52,320	27-07	20 800	71.56 550
	30	8.78 -8	44.58 277	T8.05T	29.55 355 29.55 332	21 52 202 /3	37.47	20.018	7180
Febr.	9	8.70 24	47.35 264	17.960 158	32.87 332	52.408	28 OT 3T	30.877	77.81 301
		0 .6				39	38.66	9/	-/-
	19	8.46	49.99 241	17.802 216	35.89 265	52.369 89		30.780	80.52
März	29	0.01	52.40 207	17.586 266	38.54 224	52.280 130	39.36 70 40.06 68	30.634 187	82.89 197 84.86
MINIZ	10	1.30 61	54.47 166	17.320 302	40.78	52.150 162	00	30.447 219	96 17 133
	20	6.95 68	56.13 118		42.55 129	51.988 183	40.74 60	30.228 240	85.57
	30	6.27 71	57·31 <sub>67</sub>	16.690 328	43.84 78	51.805 193	41.34 50	29.988 251	87.51 65
Apr.	9	5.56 72	57.98 15	16.350 341	44.62 26	51.612 192	41.84 37	29.737 252	88.16 18
	19	4.04 60	58.13 38	16.009 331	44.88	51.420 181	42.21	29.485 242	88.34 28
	29	4.15 62	57.75 80	16.009 331 15.678 312	44.63	51.239 161	42.45	29.242	88.00
Mai	9	3.52 56	56.86	15.300 282	43.89	51.078	42.56	20.016	87.34
	19	3.52 56 2.96 46	55.51 177	15.084 246	42.67 167	50.944 103	42.53	28.814 172	86.19 154
	29	2.50 36	53.74 212	14.838 204	41.00 208	50.841	42.39	28.642 138	84.65 190
Juni	8	2.14 23	51.62 241	14.034	38.92	50 771	42.14	28.504 100	82.75 221
	18	1.91 10	49.21 264	14.478 105	36.49 271	50.744	41.70	28.404 61	80.54 246
	28	1.81	46.57 278	14.373 52	33.78 293	50.751	41.36	28.343 19	78.08 264
Juli	8	1.83 15	43.79 287	14.321 4	30.85 305	50.796 82	40.86 57	28.324 24	75.44 275
	18	* .00		Т Т	27 80	02			
	28	1.98 28	40.92 289	14.325 61	27.80 309	50.878 116	40.29 63	28.348 66	72.69 278
Aug.		2.26 39	38.03 284	14.386	24.71 303 21.68 288	50.994 148	39.66 69	28.414 108	69.91 270
itus.	7	50	35.19 274	14.502	18 80 288	51.142 180	38.97 38.22 80	28.522 148	67.21 255
	17 27	3.13 60	32.45 258	14.673 223 14.896 272	18.80 261	51.322 207	27 42	28.670 188 28.858 <sub>225</sub>	64.66 231
~	-/	3.75 70	29.87 238	14.090 272	16.19 225	51.529 234	37.42 87	20.050 225	62.35 196
Sept.	6	4.45 77	27.49 211	15.168 316	13.94 181	51.763 259	36.55 92	29.083 258	60.39 155
	16	71	25.38	1 15.404	12.13	52.022 281	35.63	20.341	50.04 105
011	26	0.07	23.50	1 15.039 .00	10.85 69	52.303	34.65 102	29.030	57.79 51
Okt.	6	0.9/ 01	22.10	10.225	10.10 6	52.003	33.63	29.945 221	57.28 7
	16	7.91 96	21.02 67	16.633 420	10.10 58	52.920 330	32.58 104	30.279 346	57.35 67
	26	8.87 97	20.35 22	17.053 421	10.68		31.54 102	30.625 351	58.02 125
Nov.	5	9.04	20.13	17.474	11.90 183	53.250 <sub>338</sub> 53.588 <sub>338</sub> 53.926 <sub>331</sub>	30.52	30.9/0 216	59.27 .0-
	15	10.79 92	20.13 24 20.37 72	17.883 385	13.73 238	53.926	30.52 29.58 94	31.322 331	61.07 230
	25	11.71 0.	21.09 778	18.268 348	10.11 284	54.257 316	28.75 69	31.653 306	63.37 271
Dez.	5	12.56 76	22.27 163	18.616 299	18.95 322	54·573 <sub>291</sub>	28.06 51	31.959 271	66.08 304
	15	13.32 65	23.90 202	18.915 241	22.17	54.864 <sub>257</sub>	27.55	32.230 226	69.12 326
	25	13.07	25.92	19.156	25.66 349	55.121 213	22.21	32.456	72.38 338
	35	13.97 51	28.27	19.330	25.66 364 29.30	55.334	27.14	32.631	72.38 75.76 338
300			,		·		1 1	0 0	10.1
Mittl.		3.19	52.87	15.148	14.07	50.144	50.79	28.445	59.27
sec 8,	-	3.646	+3.506	1.655	-1.318	1.132	o.531	1.302	-0.834
	ere'	1 = 0	0 -	1 7 7	-07	+3.7	-10.0	+2.I	-10.1
a, a, b, l		+7.2 -0.11	-9.5 -0.88		—9.7 —o.88	-0.02	- 0.87	+0.03	- 0.86

<sup>\*)</sup> Bei Stern 305) und 306) lies Jan. 21.

т	ag	307) 27	Lyncis	308) p	Puppis	309) Y	Velorum	311) 20	Puppis
	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	8 <sup>h</sup> 3 <sup>m</sup>	+51°40′	8 <sup>h</sup> 4 <sup>m</sup>	-24°7′	Sh 7m	-47°9'	8 <sup>h</sup> 10 <sup>m</sup>	-15° 36′
Jan.	I	59.508 244	37.25 138	61.193	55.84 288	43.433 149	36.40 361	36.260	30.87 251
	II	59.752 171	38.63	61.341	58.72	43.582	40.01	36.417 108	33.38 240
	21	59.923 93	40.24	61.437 96	61.52 262	43.665	43.59 247	36.525 56	35.78 223
	30	60.016	42.01 186	<sup>23</sup> 61.480 <sup>43</sup>	04.15	43.680 52	47.06 377	36.581	38.01 201
Febr.	9	60.029 63	43.87 186	61.470 60	00.55	43.628 113	50.32 297	36.586 43	40.02 175
	19	59.966	45.73 177	61.410	68.68	43.515 168	53.29 263	36.543 87	41.77
	29	59.833	47.50	61.306	70.49	43.347 215	55.92	36.456	43.24 117
März	10	59.640	49.11	61.165	71.97	43.132	58.15 179	36.332	44.41 86
	20	59.402	50.48 109	60.995	73.09 75	42.882	59.94	30.180	45.27 56
	30	59.131 287	51.57 75	60.806 189	73.84 38	42.607 289	61.26 84	36.009 181	45.83
Apr.	9	58.844 289	52.32 40	60.609	74.22 2	42.318 291	62.10 35	35.828 181	46.07
	19	58.555	52.72 4	60.411	74.24 34	42.027 284	62.45	35.647	40.02
	29	58.278	52.76 31	60.221	73.90 69	41.743 268	62.31	35.474	45.68 63
Mai	9	58.020	52.45 6=	60.047	73.21	41.475	61.68	35.315 128	45.05 88
	19	57.809 173	51.80 96	59.895 152	72.20 132	41.230 213	60.59 152	35.177 113	44.17 113
	29	57.636 125	50.84 122	59.769	70.88	41.017 176	59.07 192	35.064 84	43.04 133
Juni	8	57.5TT	49.62 146	59.673	69.29	40.841 137	57.15 226	34.980 53	41.71
	18	57.438 73	48.16	59.610	67.47	40.704 92	54.89 255	34.927 21	40.19 167
	28	57.420 37	46.52	59.581 29	05.47	40.612 46	52.34 277	34.906 11	38.52
Juli	8	57.457 90	44.73 189	59.587	63.34 220	40.566 = 2	49.57 290	34.917 43	36.76 181
	18	57.547 141	42.84 195	59.628	61.14 210	40.568	46.67 295	34.960 75	34.95 180
	28	57.688	40.89 198	59.702 74	58.95 272	40.618	43.72	35.035 75	33.15 171
Aug.	7	57.878 226	38.91	59.810 108	56.83	40.717	40.81	35.142	31.44
	17	58.114 278	36.94 102	59.951	54.86	40.864	38.04 253	35.278 165	29.86
	27	58.392 317	35.01 185	60.122 171	53.11	41.057 236	35.51 220	35.443 192	28.49
Sept.	6	58.709 353	33.16 175	60.323	51.67 107	41.293 277	33.31	35.635 218	27.39 77
	16	59.062 384	31.41 161	00.551	50.60 64	41.570	31.54 127	35.853	20.62
	26	59.446	29.80	60.804 253	49.96	41.004	30.27	30.095 262	26.22
Okt.	6	59.859	28.36	61.079 275	49.77	44.44 267	29.56	36.358	26.23
	16	00.294 452	27.12	$61.372 \frac{293}{305}$	50.08 81	42.594 381	29.45 52	36.639 <sub>294</sub>	26.68 87
	26	60.746 <sub>162</sub>	26.11	61.677	50.89 129	42.975 386	29.97 115	36.933 <sub>301</sub>	27.55 129
Nov.	5		25.38	61.988 311	52.18	43.361 381	31.12	37.234 202	28.84 ,66
	15	61.669 451	24.95	62.298 310	53.92	43.742 364	32.85	37.537 206	30.50
	25	128	24.84 =	62.599	50.04	43.742 <sub>364</sub> 44.106 <sub>335</sub>	35.12	37.033 <sub>281</sub>	32.40 223
Dez.	5	62.548 393	25.07 59	62.881 282 255	58.48 268	44.441 295	37.86 311	38.114 256	34.71 241
	15	62.941 346	25.66	63.136	61.16 281	44.736 246	40.97 337	38.370 224	37.12 251
	25	03.287 286	26.59 122	63.356	63.97 287	44.982 187	44.34 353	38.594 184	39.63 252
	35	63.573	27.82	63.533 177	66.84	45.169	47.87	38.778	42.15
Mittl		57.146	53.41	59.271	48.57	40.960	32.15	34.441	22.60
sec δ,	_	~	+1.265	1.096	-0.448	1.471	<b>−1.078</b>	1.038	-0.279
a,			-10.3		—IO.4		-1o.6	+2.8	-10.8
b,	b'	-0.04	- o.86	+0.02	— o.86	-⊢0.04	0.85	+0.01	— o.84

T.	ag	310) Br 1	147 Caml	312) β	Cancri	314) 31	Lyncis	315) € 0	arinae
1.	45	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	8h 12m	+75° 56′	8 <sup>h</sup> 13 <sup>m</sup>	+9° 21'	8 <sup>h</sup> 18 <sup>m</sup>	+43° 22'	8h 21m	-59° 18′
Jan.	1	8.42	17.84 245	17 452	66.68	46.087 236	20.70	20.202 183	58 <sup>8</sup> 80
O WILL	II		20.20	17.453 <sub>174</sub> 17.627 <sub>127</sub>		46.222	39.79 84	20.385 07	58.89 376
	21	8.95 35	20.29 270	17.02/ 127	65.51	46.323 173	40.63 108	20.482 97	62.65 381 66.46 371
		9.30 16	22.99 284	17.754 76	64.51 79	46.496 106 46.602	41.71 129	27	70.20 374
Dob.	30	9.46	25.83 287	17.830 24	63.72 59	3/	43.00 143	20.491 75	
Febr.	9	9.43 21	28.70 279	17.854 25	63.13 40	46.639 29	44.43 150	20.416 75	73.78 334
	19	9.22 38	31.49 258	17.829 70	62.73	46.610	45.93 149	20.261 226	77.12 301
	29	8.84 53	34.07 228	17.759 108	62.50 7	46.518 45	47.42	20.035 287	80.13 262
März	10	8.31 65	36.35 189	17.651 138	62.43	40.373 -86	48.83 126	19.748 336	82.76 219
	20	7.66	38.24 143	17.513 158	62.49 16	46.187 217	50.09	19.412 372	84.95
	30	6.92 80	39.67 92	17.355 168	62.65 26	45.970 234	51.16 82	19.040 395	86.67 122
Apr.	9	6.12 81	40.59 38	17.187 168	62.91	45.736	51.98	18.645 404	87.89 69
	19	5.2T	40.97 16	17.010	$63.23 \frac{3^2}{38}$	45.498	52.53 26	18.241	88.58 18
	29	4.52	40.81 68	16.858	62.6T	45.268 212	52.70	17.840 387	88 76
Mai	9	277 /3	40.13 118	16.713 124	64.02	45.056 184	52.76	17.453 363	QQ 4T
	19	2.00	38.95 163	1 TA 280	64.40	44.872	F2 45	17.090 303	87.54 134
		30		90	77		50		
Total	29	2.51 46	37.32 203	16.491 69	64.98	44.723 110	51.87 81	16.762 287	86.20 180
Juni	8	2.05 34	35.29 236	16.422	65.50	44.613 67	51.06 102	16.475 237	84.40 221
	18	1.71	32.93 262	16.385	66.03 54	44.546 23	50.04 119	10.230 182	82.19 255
	28	1.51 6	30.31 282	16.380 =	66.57 52	44.523 21	48.85 135	16.055 123	79.04 -87
Juli	8	1.45 9	27.49 294	16.407 58	67.09 49	44.544 66	47.50 147	15.932 60	76.82 302
	18	1.54 22	24.55 301	16.465 89	67.58	44.610 109	46.03 155	15.872 7	73.80 313
	28	1.76 36	21.54	16.554	68.02	44.719	44.40 .60	15.879 72	70.07 212
Aug.	7	2.12	18.54 292	10.072	68.37	44.869 188	42.86 165	15.952 141	67.54 304
	17	2.61 60	15.02	10.817	68.61	45.057	41.21 167	16.093 208	64.50 -0.
	27	3.21 72	12.82 262	16.990 197	$68.71 \frac{10}{6}$	45.282 259	39.54 166	16.301 271	61.66 253
Sept.	6	2.02	10.20	17.187 221	68.65	45.541 291	37.88 163	16.572	59.13 213
	16	175	7.83 208	17.408 243	68 40 23	45.832 320	36.25 157	16.902 383	57.00 164
	26	5.65	5.75 175	17.651 263	67.04	46.152 348	34.68 148	17.285 383	55.36 107
Okt.	6	6.62	4.00	17.914 281	67 27		33.20	17.712 461	=1.20
	16	7.65 107	2 02	18.195 295	66.38 108	46.870 370	31.83	18.173 483	53.84 20
	26	1	T 60	18 400	100			18.656 491	54.04 86
Nov.	5	8.72	1.09 49	18.490	65.30	47.258 401	30.62	10.147	54.00
- 10.11	15	9.81	1		64.06	47.659 404	29.60 80 28.80	19.147 485	54.90 150
	-	10.88	1.19 49	19.100	146	48.063 400	28.26 54	19.632 462	56.40 210
Dez.	25 5	11.93 98	2.67 99	19.403 <sub>290</sub> 19.693 <sub>269</sub>	61.22 <sub>148</sub> <sub>59.74 <sub>145</sub></sub>	48.463 384 48.847 358	20 00 -4	20.094 424 20.518 372	58.50 <sub>263</sub> 61.13 <sub>307</sub>
	_	"					0		
	15	13.80 78	4.13 190	19.962	58.29	49.205 319	28.08 37	20.890 307	64.20 342
	25	14.58 63	6.03 228	20.202	50.92 125	49.524 271	28.45 69	21.197 232	67.62 364
	35	15.21	8.31	20.403	55.67	49.795	29.14	21.429	71.26 364
	. Ort	3.41	35.50	15.735	78.56	44.071	56.03	17.042	56.98
sec 8	, tg ð	4.117	+3.994	1.014	+0.165	1.376	-⊢0.945	1.960	-1.685
a,	a'	+7.5	-10.9	+3.3	-11.0	+4.1	-11.4	+1.2	-11.6
b,	6'	-0.15	- o.8 <sub>4</sub>	-0.01	— o.84	-0.04	- o.82	+0.06	- o.82

T.	ag	318) 9 (	Chamael.	316) Br 119	97 Hydra	317) o U	rsae maj.	320) Grb 1	450 Lynx
1.	ъ	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	8h 22m	-77° 17′	8h 22m	-3° 42'	8 <sup>h</sup> 25 <sup>m</sup>	+60° 54′	8 <sup>h</sup> 29 <sup>m</sup>	+38° 12
Jan.	I	35.57 28	20.02	41.455 174	12 04	20.38 33	56.69 171	2 120	69.22
0 1111	II	2=0-	30.02 371	41.629 127	43.94 193	20.71 24	58.40 200	3.139 234	60.70
	21	25.02	33.73 381	41.756	45.87 <sub>179</sub> 47.66 <sub>161</sub>	20.95	60.40	3.373 176	70 44 /4
	30	27 35.93 TO 35.83 20	37.54 380	27 47 822 //	49.27	21.09 4		3.549 113 3.662 50	77.40
Febr.	9	25.54	41.34 369	47 850	50.66	21.13 5	64.91 232	2712	72.52
1 0.511	9	4-	45.03 348					-3	72.53 125
	19	35.08 61	48.51 319	41.837 67	51.82 92	21.08	67.23 222	3.699 72	73-78 128
11"	29	34.47 74	51.70 285	41.770	52.74 68	20.94 23	69.45 205	3.627 122	75.06 126
März	10	33.73 85	54.55 243	41.666	53.42	20.71 29	71.50 177	3.505 163	76.32 117
	20	32.88 93	56.98 198	41.533	53.87 24	20.42 33	73.27 143	3.342 192	77-49 102
	30	31.95 99	58.96 149	41.379 166	54.11 2	20.09 33	74.70 105	3.150 210	78.51 83
Apr.	9	30.96	60.45 97	41.213 167	54.13	19.72 38	75.75 62	2.940 215	79.34 62
	19	29.94	61.42	41.046	53.96 35	19.34	76.37 17	2.725 209	79.96 38
	29	28.92 101	61.86	40.885	53.61 52	18.97 25	76.54 26	2.516 194	80.34 13
Mai	9	27.91 06	61.76	40.736	53.09 68	10.02	76.28 68	2.322	80.47
	19	26.95 89	61.12	40.607 105	52.41 83	18.31 26	75.60	2.151 141	80.36
	29	26.06 81	59.98 162	40.502	51.58	18.05 21	74.53 142	2.010 105	80.02
Juni	8	25 25	58.36 206	40.423	50.63 105	17.84	73.11	T 005	79.46
	18	21 55	56.30	40 274 49	49.58 113	17.69 8	71.38 173	1.838 67	78 71
	28	23.07	53.85 277	40 255	48.45 118	17.61 2	69.39 219	T.8TO -	77.79 106
Juli	8	23.54 43	51.08 300	40.366	47.27 118	17.59 -6	67.20 234	1.822 52	76.73 110
	18	22.25		40.408	46.09 116	17.65		T 874	
	28	23.13	48.08	40.480	44.02	17.77 18	64.86	1.065 91	75.54 129
Aug.	7	23.17	44.93 321 41.72 315	40 CST	44.93 107	17.77 18	62.41 249	1.965 129	74.25 137 72.88 143
	17	22.20	28.57 315	10 570	12 OT 23	18.20	59.92 249	2258	71.45 148
	27	22.77	38.57 <sub>299</sub> 35.58 <sub>271</sub>	. 000	12.T2	18.50 30	57.43 <sub>245</sub> 54.98 <sub>236</sub>	2.456 231	69.97
	- 1	-3.11 54		103	33	36			
Sept.	6	24.31 69	32.87 235	41.049 208	41.58 29	18.86	52.62	2.687 261	68.45 152
	16	25.00 81	30.52 _00	41.257 231	41.29	19.20 46	50.40 204	2.948 200	00.93 100
	26	25.81 92	28.64	41.488 253	41.30 32	19.72	48.36 182	3.230 216	05.41 148
Okt.	6	26.73 99	27.30	41.741 272	41.62 66	20.21	46.54 156	3.554 340	03.93
	16	27.72 103	26.58 7	42.013 287	42.28 98	20.74 53	44.98 125	3.894 359	62.51 132
	26	28.75 104	26.51 59	42.300 298	43.26 129	21.29 57	43.73 90	4.253	61.19 119
Nov.	5	29.79 101	27.10	42.598	44.55	1 21.00 0	42.83 52	4.626 370	60.00
	15	30.80 95	28.35 187	42.899 298	46.10	22.44	42.31 12	5.005 377	58.99 70
	25	31.75 85	30.22 242	43.197 286	47.87	23.00 55	42.19 32	4.026 5.005 377 5.382 366	58.20
Dez.	5	32.60 71	32.65 291	43.483 266	49.79 200	23.55 50	42.51 75	5.748 342	57.65 26
	15	32.3T		43.749 237	51.79 202	24.05 45	43.26 115	6.090 309	57-39
	25	22 88 3/	38.85	43.986	53.81	24.50	44.41 153	6.399 266	57.42
	35	34.26 38	35.56 38.85 357 42.42	44.185	55.78	24.50 38 24.88	45.94	6.665	57.74
Mitt	l. Ort			20.710			1 2000	1.280	
		28.79	29.66	39.740	34.12	17.74	74.65	1	85.31
	a'	4.546	-4·434	1.002	-0.065	2.058	+1.798	1.273	+0.788
	6'	-1.7	11.7 0.81	+3.0	—11.7 — 0.81	+5.0	-11.9 - 0.81	+3.9 -0.03	-12.I - 0.80

Та	1.0	32I) ŋ	Cancri	327) α P	yxidis	326) S	Cancri	330) δ Ve	lorum m
	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	8 <sup>h</sup> 29 <sup>m</sup>	+20° 38′	8 <sup>h</sup> 41 <sup>m</sup>	-32°58′	8 <sup>h</sup> 41 <sup>m</sup>	+18°22'	8 <sup>h</sup> 43 <sup>m</sup>	-54°29′
Jan.	I	16.151 201	33.10	12.798 187	13.00	18.281 210	20.53	5.591 212	17.11 367
	II	16.352	32.55	12.985	16.21 320	18.491	TO.78	5.803 138	
	21	16.505 99	32.21 34	13.119 78	19.41 309	18.653	10.25	5.941 <sub>61</sub>	24.52
	30*)	L ID-DO4	32.09 -	13.197 20	22.50 292	18.763 56	18.95 8	6.002	28.24
Febr.	9	16.649 45	32.17	13.217 34	25.42 267	18.819 4	18.87	5.987 88	31.83 359
	19	16.641 58	32.41	13.183 83	28.09 238	18.823 46	18.97	5.899 155	35.21 309
	29	16.583	32.80	13.100	30.47 203	18.777	19.24 38	5.744 213	38.30 273
März	10	16.483	33.27	12.973 ,62	32.50 166	18.689	19.62 46	5.531 <sub>260</sub>	41.03 232
	20	10.350	33.80	12.811	34.16	18.500	20.08	5.271 296	43.35 188
	30	16.193 171	34.34 54	12.623 203	35.43 86	18.418 163	20.58 50	4.975 <sub>321</sub>	45.23 139
Apr.	9	16.022	34.86 48	12.420	36.29	18.255	21.10 49	4.654	46.62
	19	15.047	35.34 42	12.209	36.74 45	18.086	21.59 46	4.520 225	47.52 39
	29	15.677	35.76	12.000	36.77	17.920	22.05 40	1 3.202 228	47.91 12
Mai	9	15.521	36.10 27	11.800	36.40	17.700	22.45 35	3.057	47.79 62
	19	15.385 110	36.37 19	11.616 162	35.63 113	17.629 114	22.80 28	3.346 285	47.17 111
	29	15.275 82	36.56	11.454 137	34.50 148	17.515 86	23.08	3.061 252	46.06 156
Juni	8	15.193 49	36.68	11.317 108	33.02	17.429 57	23.30	2.809	44.50 108
	18	15.144 18	36.72	11.209 75	31.23	17.372 27	23.44 8	2.595 169	42.52 222
	28	15.126	36.68	11.134	29.19	17.345 5	23.52 <sub>I</sub>	2.426	40.19 262
Juli	8	15.143 47	36.58	11.092 6	26.95 238	17.350 36	23.53 7	2.305 69	37.56 285
	18	15.190 81	36.39 26	11.086	24.57 244	17.386 67	23.46	2.236 14	34.71 299
	28	15.271	36.13	11.115	22.13	17.453 97	23.30 25	2.222	31.72 200
Aug.	7	15.382	35.78	11.181	19.70	17.550 126	23.05 36	2.266	28.09 207
	17	15.522	35.33 56	11.284	17.30 215	17.676	22.69 48	2.307 160	25.72 281
	27	15.690	34.77 68	11.424 176	15.23 187	17.830 182	22.21 62	2.527 217	22.91 254
Sept.	6	15.886 221	34.09 80	11.600	13.36	18.012	21.59 76	2.744 <sub>271</sub>	20.37 218
	16	10.107	33-29 93	11.810	11.84	18.221	20.83	3.015	18.19
03.	26	10.354	32.36	12.054	10.74 61	18.450	19.93 105	3.336 365	10.40
Okt.	6	10.024	31.32	12.327	10.13	1 10.715	18.88	3.701	15.27 60
	16	10.914 306	30.17 123	12.626	10.04 45	18.996 300	17.70 129	4.103 428	14.67
	<b>2</b> 6	17.220 320	28.94 129	12.945 332	10.49 101	19.296	16.41 136	4.531 443	14.70 68
Nov.	5	1 1/0340	27.05	1 13.4// 227	11.50	1 19.010 222	15.05	4.974 446	15.38 132
	15		20.30	13.014 222	13.03	19.934	13.05 128	5,420	10.70
m-1	25	10.190	25.11	13.947	15.03	20.255 315	12.27	5.054	18.02
Dez.	5	18.504 296	23.93 104	14.266 294	17.45 276	20.570 299	10.94 121	0.202 369	21.07 292
	15	18.800 266	22.89 87	14.560 260	20.21 300	20.869 271	9.73 105	6.631 216	23.99 328
	25	19.000	22.02 67	14.820 216	25.21 314	21.140 226	8.68 86	0.947 254	27.27 254
	35	19.295	21.35	15.036	26.35	21.376	7.82	7.201	30.81
	l. Ort	14.458	46.81	10.784	8.85	16.646	34.01	2.798	16.33
	$\delta$ , tg $\delta$	1.069	+0.377	1.192	-0.649	1.054	+0.332	1.722	-1.401
	a'	+3.5	-12.1	+2.4	-13.0	+3.4	-13.0	+1.7	-13.I
<i>b</i> ,	b'	-0.02	— o.8o	+0.03	-0.76	-0.01	-0.76	+0.06	<ul><li>– 0.76</li></ul>

<sup>\*)</sup> Bei Stern 327), 326) und 330) lies Jan. 31.

Ta	or	328) ı	Cancri	334) ζ I	Hydrae	336) 108 (	G. Carinae	335) t Ur	sae maj.
10	ıs	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	8 <sup>h</sup> 43 <sup>m</sup>	+28° 58′	8 <sup>h</sup> 52 <sup>m</sup>	+6° 10′	8 <sup>h</sup> 53 <sup>m</sup>	-60° 24'	8 <sup>h</sup> 55 <sup>m</sup>	+48° 16′
Jan.	1	5.888 228	35.52	14.964 207	18.87	44.55 25	52.53 368	8.408 295	24.82 86
o tell,	II	6.116	25.28	15.171 162	17.40	44.80 16	1 50.2T -	8,703	
	21	6.293 120	35.51 37	15.333 112	16.11 108	44.96 8	56.21 380 60.01 382	8.703 <sub>232</sub> 8.935 <sub>161</sub>	26.87 146
	31	6.413 63	35.88 37	T C 44 C	15.03 86	45.04 2	63.83 382		28 22 146
Febr.	9	6 446	36.45	7 7 7 706		45.02 9	67.55 372	4 9.183 87	28.33 <sub>167</sub> 30.00 <sub>180</sub>
1 001.	9	_	/+		04		355		
	19	6.482 48	37.19 85	15.517 36	13.53	44.93 17	71.10 328	9.196 56	31.80 184
310	29	6.434 95	38.04 90	15.481 77	13.11	44.76 25	14.30 205	9.140 119	33.64
März	10	6.339	38.94 91	15.404 110	12.89 6	44.51 30	77.33 206	9.021	35.43 166
	20	6.207 161	39.85 86	15.294 135	12.83 -	44.21 34	79.89 212	8.849	37.09 147
	30	6.046	40.71 76	15.159 151	12.93	43.87 38	82.01 165	8.037	38.56
Apr.	9	5.867 185	41.47 65	15.008 158	13.15 32	43.49 39	83.66	8.397 255	39.78 gr
	19	5.682 182	42.12 49	14.850	13.47	43.10	84.80 62	0.142	40.69 58
	29	5.499 171	42.61	14.093	13.88	42.69	85.42 10	1.00/ 215	41.27 24
Mai	9	5.328	42.95	14.540	14.36	42.30 28	85.52 42	1.042	41.51
	19	5.176 132	43.12	14.413	14.89 58	41.92 36	85.10	7.418 224	41.40
	29	5.049	43.13	14.300 89	15.47 61	41.56 33	84.17	7.223 160	40.96
Juni	8	4.950 66	12.00	14211	16.08 64	41.23 28	82.76	7.063	10.21
	18	4.884 32	42.70	14.148	T6.72	40.95 23	80.90 226	6.943 76	39.16
	28	$4.852 \frac{3^2}{2}$	42.27	TA.TT2 35	17.26	40.72 18	78.040	6.867	37.87 152
Juli	8	4.854 36	41.72 67	$14.106 \frac{7}{21}$	17.99 60	40.54 12	76.06 285	$6.836 \frac{31}{14}$	36.35 171
	18	4.800	41.05	14.127	18.59	40.42 5	73.21 302	6 9 = 0	34.64 186
	28	1.060	10.08	T4.177	TO.T2	$40.37 \frac{5}{1}$	70.19 302	6.910	32.78 197
Aug.	7	5.063 134	20.40	T4 256 19	10.58	10.28	67.09 308	7.014 148	30.81 206
	17	5.197 166	38.43 107	14.363	TO.OT 33	40.47	1.07.01	7.162 190	28.75
	27	5.363	37.36 116	14.497 162	20.10	40.62	61.06 295	7.352 231	26.65 212
Sept.	6	5.558 224	36.20	14.659 188	20.10	40.85 29	58.34 238	7.583 270	24.53 211
~ cPet	16	5.782	34.96	14.847 215	10.80	41.14 35	55.96	7.852	22.42 205
	26	6.034 278	33.66	15.062 241	TO 45	41.49 35	54.02	1 0.101	20.37 195
Okt.	6	6.312	32.30 136	15.303 263	T8.77	41.90 45	1 52 50	8.504 343 8.878 374	18.42 182
	16	$6.614 \frac{302}{322}$	30.90	$15.566_{283}$	17.85	42.35 49	51.75 20	8.878 401	16.60 164
	-6	322		_				401	
Nov.	26	6.936	29.50 136	15.849 298	16.70 136	42.84 51	51.55 45	9.279 422	14.96
110V.	5		28.14 128	16.147 308	15.34 153	43.35.51	52.00 111	9.701 436	13.55
	15	1.020	26.86	10.455	13.81 165	43.86 51	53.11	10.1.7/ 100	12.41 83
Dez.	25 5	7.967 347 8.307 322	23.71 99	16.766 3°4 17.070 289	12.16 171 10.45 172	44.37 47 44.84 42	54.85 231 57.16 281	10.575 430	11.58 48
-	3		24.72 78	_	1				
	15	8.629 293	23.94 54	17.359 264	8.73 165	45.26	59.97 321	11.415 376	10.99 28
	25	8.922 256	23.40 28	17.623 231	7.08 155	45.03 30	63.18 352	11.791 329	11.27 66
	35	9.178	23.12	17.854	5.53	45.93	66.70	12.120	11.93
Mittl.		4.207	50.75	13.373	30.11	41.35	53.33	6.535	43.08
sec δ,		1.143	+0.554		+o.108	2.025	-1.761	1.503	+1.122
a,	a'	+3.6	-13.1	+3.2	-13.7	÷1.4	-13.8	+4.2	-13.9
b, 1	b'	-0.02	- o.76		- o.73	-+0.08	- o.73	-0.05	— 0.72

773		337) α	Cancri	339) Br 12	68 Lynx	341) × U	rsae maj.	343) α '	Volantis
1	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	8 <sup>h</sup> 55 <sup>m</sup>	+12° 5′	8 <sup>h</sup> 56 <sup>m</sup>	+42° 0'	8 <sup>h</sup> 59 <sup>m</sup>	+47°23'	9 <sub>p</sub> 1 <sub>m</sub>	-66° 9′
Jan.	I	14.002 215	15.88	46.862 272	60.52	24.101	24.70 78	24.12	20.27
o and	II	14.217	14.72	47.134 216	61.03 83	34.101 34.398 235	25.48	34.12 34.42	20.27 366 23.93 382
	21	14.387 170	12.77	47.350 152	61.86	34.633 167	26.60	24 6T	27.75 <sub>386</sub>
	31	T 4 FOR	T2.04	47.502 85	62.97	24 800	28.00 162	2470	31.61 382
Febr.		14.574 <sub>16</sub>	T2 FF 49	547.587 18	64.29	524 804 97	29.62	6 34.69 I	35·43 <sub>367</sub>
		-	20	-					
	19	14.590 32	12.27 9	47.605 45	65.76	34.915 48	31.39 181	34.57 21	39.10
3.7	29	14.558 74	12.18	47.560 102	U7 31	34.867	33.20 178	34.36 29	42.53 212
März	10	14.484 109	12.27	47-458 149	08.85 146	34.757 162	34.98 167	34.07 36	45.65 275
	20	14.375	12.48	47.309 185	70.31	34.595 204	36.65	33.71 42	48.40 233
	30	14.240	12.80 39	47.124 209	71.63	34.391 231	38.14 125	33.29 46	50.73 186
Apr.	9	14.089 160	13.19	46.915 222	72.75 88	34.160 246	39·39 <sub>95</sub>	32.83 48	52.59 135
	19	13.929	13.63	46.693	73.63 60	33.914 248	40.34 63	32.35	53.94 84
	29	13.771	14.10 48	46.470	74.23 31	33.666	40.97 30	31.85 50	54.78 30
Mai	9	13.621	14.58 47	40.257	74.54 3	33.427 220	41.27 5	31.35 40	55.08 = 23
	19	13.487	15.05 46	46.062 169	74.57 26	33.207 192	41.22	30.86 49	54.85 76
	29	13.372	15.51	45.893 137	74.31	33.015 158	10.85	30.40	54.09 126
Juni	8	13.281 64	T5.05 TT	45.756 <sub>101</sub>	73.78 53	32.857 120	40.16	29.97 43 29.97 37	52.83 173
	18	13.217	16.37 38	45.655 63	73.00 <sub>101</sub>	32.737 <sub>78</sub>	39.19 97	29.60	51.10 215
	28	13.180 7	16.75	45.592 23	71.99 121	32.659 34	37.96 146	29.60 32 29.28 26	48.95 252
Juli	8	13.173 21	17.08 33	$45.569 \frac{-3}{17}$	70.78 138	32.625	36.50 165	29.02 18	46.43 281
	18	13.194	T7.25	15.586	69.40	32.635	34.85 181	28.84 10	43.62 301
	28	T2.245	T7 54	15 612 31	67.87 164	22 680 34	33.04 193	28.74 2	40.61 313
Aug.	7	13.324 108	17.64	45.043 <sub>96</sub> 45.739 <sub>134</sub>	66.23	32.787 <sub>141</sub>	31.11 203	$28.72 - \frac{2}{6}$	$37.48 \frac{313}{314}$
~	17	13.432	17 62	45.873 172	64.48 181	20.008	29.08 208	28.78 16	34.34 305
	27	13.567 164	17.46	46.045 208	62.67 186	32.928 <sub>182</sub> 33.110 <sub>223</sub>	27.00 210	28.94 24	31.29 284
Sept.	6		17.13		60.81 188	3			1
op or	16	13.731 <sub>191</sub> 13.922 <sub>217</sub>	16.62	46.253 <sub>244</sub> 46.497 <sub>277</sub>	58.93 187	33.333 262	24.90 <sub>210</sub> 22.80 <sub>206</sub>	29.18	28.45 <sub>253</sub> <sub>25.92 <sub>212</sub></sub>
	26	14.139 243	15.93	46.774 309	57.06 182	33.595 299	20.74	29.51 41	23.80 162
Okt.	6	14.382 266	15.03 108	47.083 339	55.24	33.894 34.228 367	18.77 185	29.92 47	22.70
	16	14.648 287	13.95	47.422 364	53.50 163	34.226 <sub>367</sub> 34.595 <sub>393</sub>	16.92 168	30.39 54 30.93 58	27.75
	-6							_	
Nov.	26	14.935 304	12.69	47.786 383	51.87 146	34.988 416	15.24 146	31.51 <sub>60</sub>	20.74 26
2101.	5	15.239 314	11.28 151	48.169 396	50.41	35.404 429	13.78	32.II 61	21.00 93
	15	1 15.555 arm	9.// 157	48.565 401	49.16	35.833 <sub>434</sub>	12.50 90	32.72 60	21.93 157
Dez.	25 5	15.870 311 16.181 297	8.20 157 6.63 152	40.900 393	47.47 70	36.267 427 36.694 408	50	33.32 <sub>56</sub> 33.88 <sub>51</sub>	23.50 <sub>217</sub> 25.67 <sub>269</sub>
				49.359 376	47.47 37		11.12 18		
	15	16.478 272	5.11	49.735 345	47.10 3	37.102 375	10.94 20	34.39 44	28.36 314
	25	10.750	3.70 125	50.080 304	47.07 33	37.477 227	11.14 58	34.83 35 35.18	31.50 348
	35	16.990	2.45	50.384	47.40	37.808	11.72	35.18	34.98
	. Ort	12.431	28.27	45.117	78.04	32.282	43.01	30.31	22.36
sec δ,	$tg \delta$	-	+0.214		+0.901		+1.087	2.474	-2.263
a,		_	-		-14.0		14.1	+0.9	-14.3
b,	b'				- o.72		— o.71	+0.11	— o.70

т.	ag	344) σ² U	Jrsae maj.	345) λ V	elorum	347) &	Hydrae	348) β (	Carinae
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	9 <sup>h</sup> 5 <sup>m</sup>	+67°22'	9 <sup>h</sup> 5'''	-43°11′	9 <sub>p</sub> 11 <sub>m</sub>	+2° 33′	9 <sup>h</sup> 12 <sup>m</sup>	-69° 28′
Jan.	1	10.91	27.09 169	49.447 225	23.00 343	16.135 221	56.09 172	37·37 <sub>35</sub>	7.90 <sub>359</sub>
	11		28.78 206	49.672 167	2043 240	16.356	54.37	37.72 24	1 11.44
	21	11.75 26	30.84 236	49.839 105	29.93 347	16.533 129	52.82	37.96	15.28 387
	31	7 12.01	33.20 256	749·944 41	33.40 347	1 16 662	51.47	38.08	19.15 385
Febr.	9	7 12.15 1	35.76 256	49.985 20	$36.75 \frac{335}{316}$	3 16.741 79 16.741 29	50.34 89	38.08	23.00 385
	*.		_	20		=2	- 59		3/3
	19	12.16	38.41 261	49.965	39.91 289	16.770 19	49.45 66 48.79	37.97 22	26.75 354
März	29	12.06 21	41.02 <sub>249</sub>	49.888	42.80 257	16.751 60	48.35	37·75 <sub>32</sub>	30.29 325
Marz	20	11.85 31	43.51 226	49.761 170	45.37 220	16.691 96	48.11	37·43 <sub>40</sub>	33.54 291
		11.54 38	45.77 193	49.591 202	47.57	16.595 122	48.06	37.03 46	36.45 250
	30	11.16 43	47.70 154	49.389 225	49.36 179	16.473 140	40.00	36.57 52	38.95 205
Apr.	9	10.73 47	49.24 109	49.164 239	50.71 gr	16.333 150	48.16	36.05 <sub>56</sub>	41.00 156
	19	10.20 -	50.33 61	48.925	51.62 45	16.183	48.40 37	35.49	42.56
35 .	<b>2</b> 9	9.70 47	50.94 12	48.681	52.07 -	10.032	48.77 46	34.92	43.61
Mai	9	1 4.31	51.06 37	48.441 228	52.05 47	15.880 124	49.23	34.33 ==	44.12
	19	8.86 40	50.69 83	48.213 211	51.58 91	15.752 118	49.78 63	33.76 55	44.08 56
	29	8.46	49.86	48.002 188	50.67 132	15.634 97	50.41 69	33.21 51	43.52 108
Juni	8	0.12 20	48.59 ,67	47.814	49.35 170	15.537 74	51.10 73	32.70 46	42.44 157
	18	7.83 21	40.92	47.655 128	47.65	15.463	51.83 76	32.24	40.87
	28	7.62	44.90	47.527 93	45.61 232	15.414 23	52.59 77	31.83 22	38.85 2.11
Juli	8	7.49 4	42.59 255	47.434 54	43.29 252	15.391 -5	53.36 74	31.50 25	36.44 273
	18	7.45 2	40.04 273	47.380	40.77 266	15 206	54.10	31.25 16	33.71 297
	28	7.48 3	37.31 .0.	$47.365 \frac{15}{28}$	38.11 200	T5.427	54.80 70	31.09 7	30.74 312
Aug.	7	7.59	34.46 291	47.393 72	35.40 268	TE 486 39	CCAT	2T.02	27.62 316
	17	7.78	31.35 202	47.465 117	32.72	15.573	55.01	31.06 4	24.46 311
	27	8.06 35	28.63 287	47.582 161	30.18 231	15.688	56.25 34	31.20 25	21.35 293
Sept.	6	8,41	25.76 276	47.743 205	27.87 198	15.831 171	56.40	31.45 34	18.42 266
	16	8.82 49	23.00 260	47.948 247	25.89 157	16.002 200	56 22	31.79 44	15.76 227
	26	9.31	20.40 238	48.195 286	24.32 109	16.202	76 OT	32.23 52	13.49 179
Okt.	6	9.86	18.02 211	48.481	23.23 55	16.420	55.43 <sub>86</sub>	32.75 <sub>59</sub>	11.70 123
	16	10.46 64	15.91 178	48.801 348	$22.68 \frac{33}{3}$	16.681 275	54.57	33.34 65	10.47 61
	26	11.10 69			22.77	16.956 294		33.99 68	9.86
Nov.	5	11.79 70	14.13	49.149 368		17.250	53.44	34.67 <sub>70</sub>	5
	15	12.49 70	12.73 97	49.517 378	23.35 123 24.58 178	17.556	52.07 158	35·37 <sub>68</sub>	9.91 72 10.63 138
	25	13.19 69	11.25 51	49.895 376	26.36	17.868	50.49 <sub>174</sub> 48.75 <sub>185</sub>	36.05 <sub>64</sub>	12.01 199
Dez.	5	13.88 66	11.23 48	50.271 364 50.635 339	28.65	17.250 306 17.556 312 17.868 308 18.176 297	46.90 189	36.69 <sub>59</sub>	14.00 254
	15	14.54 61	TT 7T	i					
	25		12.69	50.974 303	31.37 306	18.473 <sub>274</sub> 18.747 <sub>243</sub>	45.01 187	37.28 <sub>51</sub>	16.54 301
	35	15.15 15.68 53	14.14	51.277 <sub>256</sub> 51.533	34·43 <sub>331</sub> 37·74	18.990	43.14 178	37.79 <sub>42</sub> 38.21	19.55 339
М:++1	l. Ort				·				
	$t, tg \delta$	8.29	47.53	47.215	22.13	14.603	66.34	33.07	11.27
	a'	2.600	+2.400	1.372	-0.939	1.001	+0.045	2.851	-2.670
b,		+5.3	-14.5	+2.2	-14.5	+3.1	-14.9	+0.7	-14.9
υ,	U	—o.12	— o.69	+0.05	— o.69	0.00	— o.67	+0.13	— o.67

1940	Ta	ag	350) 83	Cancri	352) α I	Lyncis	353) × \	Velorum	354) α I	Hydrae
Jan. I 39.551 $_{239}$ 25.17 $_{22}$ 22.842 $_{271}$ 33.85 $_{2}$ 2 $_{14.94}$ 36.94 $_{39.96}$ 44.245 $_{39.96}$ 39.968 $_{14.94}$ 43.56 $_{39.96}$ 44.245 $_{39.96}$ 44.219 38 22.99 $_{6}$ 60.535 $_{69.96}$ 31.61 $_{19.96}$ 39.968 $_{14.94}$ 39			AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
11 39.799 194 24-25 67 20.335 165 34.13 6 18.283 203 14.94 369 40.090 184 16.334 22 33 16.334 24.23 13 14.94 129 18.590 52 22.37 368 40.497 37 67.13 19 40.219 18 22.99 40.245 57 23.30 14 20.635 67 37.81 18.599 19 29.60 312 40.235 18 23.30 12 20.40.257 12 23.30 12 20.635 67 37.81 18.599 19 29.60 312 40.235 18 23.30 12 20.40.257 12 20.568 112 30.16 18 18.597 155 32.02 40.023 13 42.23 19 20.635 67 37.81 18.599 19 29.60 312 40.533 30 70.00 10 10 10 10 10 10 10 10 10 10 10 10 1	19.	40	9 <sup>h</sup> 15 <sup>m</sup>	+17° 57′	9 <sup>h</sup> 17 <sup>m</sup>	+34° 38′	9 <sup>h</sup> 20 <sup>m</sup>	-54° 45′	9 <sup>h</sup> 24 <sup>m</sup>	-8° 23′
11 39.799 194 24-25 67 20.335 165 34.13 6 18.283 203 14.94 369 40.090 184 16.334 22 33 16.334 24.23 13 14.94 129 18.590 52 22.37 368 40.497 37 67.13 19 40.219 18 22.99 40.245 57 23.30 14 20.635 67 37.81 18.599 19 29.60 312 40.235 18 23.30 12 20.40.257 12 23.30 12 20.635 67 37.81 18.599 19 29.60 312 40.235 18 23.30 12 20.40.257 12 20.568 112 30.16 18 18.597 155 32.02 40.023 13 42.23 19 20.635 67 37.81 18.599 19 29.60 312 40.533 30 70.00 10 10 10 10 10 10 10 10 10 10 10 10 1	Jan.	1	39.551	25.17	25.842	33.85	17.964	11.41	39.864	58.94
Febr. 9**   49-128 gr   32.10 tr   25.050 is   34.74 so   35.050 is   34.74 so   34.74 so   34.74 so   34.74 so   34.74 so   35.74 so   34.74 s		II	39.790	24.25	26.113	33.83		1 -4.74 .6.	40.090	61.19
Febr. 9 1 9 40.219 38 22.99 6 16 26.055 44 35.06 197 18 29 40.245 77 12 23.05 2 24.33 39 40.245 77 12 23.05 2 25 40.053 11 20.605 44 35.06 197 18 36.07 121 18.599 92 29.60 332 40.534 11 68.59 137 67.13 197 18 18.597 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 36 12 30.10 18 18.597 18 2 20.605 30 30.905 154 26.05 59 25.795 10 10 20.00 10 19 30.505 154 27.18 49 25.591 19 30.505 154 27.18 49 25.591 19 30.505 154 27.18 49 25.591 19 30.505 154 27.18 49 25.591 19 30.205 12 27.05 30 30.505 164 27.18 49 25.591 19 30.205 12 27.05 30 30.205 12 27.05		21	39.984	22 58	26.335 .6.	24 12 3	TR 44T	18.63	40.274	63.34
Febr. 9') 40-219 38 22-99 6   20-05 44   35-00 107   18.6022 23   20-05 355   40-497 37   07.13 19   29   40-257 12   23.05 25   25-60 649 14   36.67 12   18.599 92   20.60 332   40-533   40-534   11   68.69 13   40-52   30   39.968   46   42.25		31	L 40.T28	22 16 44	26.500	24.74	T8 570	22.37 .00	40 410	65.34
19	Febr.		10 070	22.00	26.605 44	35.60	т8.622	26.05 355	40.497 37	67.13 156
Mārz 10 40.188 95 43.71 52 26.568 112 39.16 128 18.352 28 35.94 266 40.470 88 71.05 7 71.84 53 30 39.98 146 24.82 62 26.368 112 41.071 11 17.893 284 40.86 182 40.266 136 72.37 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		19	40.257	23.05	26.649	36.67	18.599	29.60	10.531	68.69
Marz 10		29	40.245	22.20	26.635 67	37.88	18.507	32.92	40.523	
20	März	10	10.188	22.71	26.568	39.16	18.352	35.94 266	40 450 33	71.05 79
Apr. 9 39.822 157 25.44 62 26.136 187 42.78 95 17.069 368 44.050 182 40.200 136 72.37 39 39.506 159 26.06 59 25.547 186 44.49 159 39.30.505 154 27.18 47 27.57 186 44.49 159 39.210 125 27.65 39 25.398 154 45.03 8 16.865 319 45.20 66 39.543 125 71.66 7.0 18 38.093 52 142 27.65 39 25.398 154 45.03 8 16.355 296 45.06 66 39.543 125 71.66 7.0 18 38.093 52 142 27.65 39 25.398 154 45.03 8 16.355 296 45.06 66 39.543 125 71.66 7.0 18 38.093 52 142 27.05 39 25.398 154 45.03 8 16.355 296 45.06 66 39.543 125 71.66 7.0 18 38.093 52 142 28.74 6 24.910 2 43.51 96 15.772 119 37.37 262 39.120 14 66.70 12 12 12 12 12 12 12 12 12 12 12 12 12		20	10.002	24.23	26.456	40.44	18.144	38.60	10.282	71 84
19   39.665   159   26.06   59   25.757   186   44.49   54   16.085   319   44.87   35   39.831   149   72.27   37   39.31   19   39.325   142   27.165   39   25.757   186   44.49   54   16.085   319   16.086   314   52.27   16   39.682   139   72.27   39.831   149   72.27   39.30   39.31   149   72.27   39.30   39.31   149   72.27   39.30   39.31   149   72.27   39.30   39.31   149   72.27   39.30   39.31   149   72.27   39.30   39.30   39.582   39.582   39.582   39.582   39.582   39.582   39.582   39.582   39.582   39.582   39.30   39.582   39.30		30	20.068	24 82	26.308 172	41.67	17.893 284	40.86 182	10 266	72.37 30
19   39.665   159   26.06   59   25.757   186   44.49   54   16.085   319   44.87   35   39.831   149   72.27   37   39.31   19   39.325   142   27.165   39   25.757   186   44.49   54   16.085   319   16.086   314   52.27   16   39.682   139   72.27   39.831   149   72.27   39.30   39.31   149   72.27   39.30   39.31   149   72.27   39.30   39.31   149   72.27   39.30   39.31   149   72.27   39.30   39.31   149   72.27   39.30   39.30   39.582   39.582   39.582   39.582   39.582   39.582   39.582   39.582   39.582   39.582   39.30   39.582   39.30	Apr.	9	39.822		26.136 187	42.78	17.609 306	42.68	40.130 148	72.67 6
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		19	39.665	26.06	25.949	12 72	1 17.303	44.02 85	39.982	
19   39-352   142   27-16   47   25-598   154   45-03   30   10-000   311   45-02   16   39-082   39   77-165   5   7   7   66-7   7   7   7   66-8   7   7   7   7   7   7   7   7   7		29		20.65	25.757 186	44.40	10.985 310	11 87	39.831	
19	Mai	9	39.352	27.18	25.571	15.03	10.000	45.22	39.682	72.21 55
3 3,902 79 28-57 13 25-015 69 44-87 58 15-543 266 41-69 19 39-159 49 66-79 12 25-015 69 44-87 58 15-543 266 41-69 19 39-159 39 66-79 12 39-159 14 66-79 12 39-159 15 69 15-172 119 37-37 37-37 262 39-150 14 66-79 12 39-159		19	39.210	27.05	25.398 154	45.33 8	16.355 296	45.06 66	39.543 125	71.66 73
3 3,902 79 28-57 13 25-015 69 44-87 58 15-543 266 41-69 19 39-159 49 66-79 12 25-015 69 44-87 58 15-543 266 41-69 19 39-159 39 66-79 12 39-159 14 66-79 12 39-159 15 69 15-172 119 37-37 37-37 262 39-150 14 66-79 12 39-159	~ .		39.085 103	28.04 31	25.244 129	- 10	16.059 273	44.40 113	100	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Juni		38.982	28.35 22	25.115 100		15.700 242	43.27 158	39.310 87	70.05 102
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			38.903	28.57	. 09	1 4 4 4 7	15.543 206	41.69		69.03
July 8 38.827 4 28.74 6 24.910 2 43.51 96 15.172 119 37.37 262 39.120 14 66.70 12	7 11			28.70		70	15.337 165	39.70 233		67.91
Aug. 7 38.803 62 28.51 29 28.204 20 25.007 100 40.18 139 14.970 44 28.99 295 39.159 69 61.90 9 27 39.135 149 27.24 71 25.241 168 37.28 160 15.116 163 23.16 260 295 39.325 128 60.95 7.   Sept. 6 39.284 178 25.66 103 25.610 234 34.00 174 15.501 26 39.904 261 23.44 133 26.405 323 28.71 174 16.488 414 13.53 38 40.260 270 16.488 177 16.488 179 16.488 179 16.488 179 16.488 179 16.488 179 16.488 179 16.488 179 18.25	Juli	8	38.827 4	28.74 6	24.910 2	, ,,,	15.172 119	37.37 262	20 120	
Aug. 7 38.803 62 28.51 29 28.204 20 25.007 100 40.18 139 14.970 44 28.99 295 39.159 69 61.90 9 27 39.135 149 27.24 71 25.241 168 37.28 160 15.116 163 23.16 260 295 39.325 128 60.95 7.   Sept. 6 39.284 178 25.66 103 25.610 234 34.00 174 15.501 26 39.904 261 23.44 133 26.405 323 28.71 174 16.488 414 13.53 38 40.260 270 16.488 177 16.488 179 16.488 179 16.488 179 16.488 179 16.488 179 16.488 179 16.488 179 18.25					24.908 33	42.55	15.053 69	34.75 282	39.106	65.45 124
Aug. 7   $38.925                                    $		28	38.863 62	28.51	24.941 66	41.44	14.984 14	31.93	20.110	64.21 120
Sept. 6 $39.284 \ 178$ $25.241 \ 168$ $25.241 \ 168$ $37.28 \ 160$ $15.116 \ 163$ $20.44 \ 288$ $23.16 \ 269$ $39.325 \ 128$ $60.95 \ 7$ .  Sept. 6 $39.284 \ 178$ $25.241 \ 168$ $25.241 \ 168$ $37.28 \ 160$ $15.116 \ 163$ $20.47 \ 20.48 \ 20.47 \ 20.48 \ 20.47 \ 20.48 \$	Aug.	7	38.925	28.22	25.007 100	40.18	14.970	28.99	39.159 60	63.01
Sept. 6			39.016	27.80	25.107	38.79	15.014 102	20.04 288	39.228	61.90 05
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		27	39.135 149	27 24	25.241 168	37.28 160	1 77 776	23.16 269	20 225	60.95 74
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sept.		39.284 178	26.53 87	25.409 <sub>201</sub>	35.68 168	15.279 222	20.47 241	39.453 157	60.21 50
Okt. $\begin{array}{cccccccccccccccccccccccccccccccccccc$			39.462	25.66	25.610	34.00	15.501	18.00	39.610	59.71 20
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	()]		39.669	24.63	25.844 -66	32.200	15.780 331	10.05		1.4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Okt.		39.904 261	23.44	26.110 295	30.48	1 10.11	14.51 98	40.015 245	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		10		22.11	20.405 323	20.71 174	10.488 414		40.200 270	60.11 85
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			40.451 306	20.65	26.728	26.97 165	16.902	13.15	40.530 201	60.96
Dez. $\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Nov.		40.757 321	19.11	1 21.013 26T	25.32 152	1 1.344 156	13.40	40.821 305	62.15
Dez. 5 $\begin{vmatrix} 41.730 & 315 \\ 42.045 & 293 \\ 25 & 42.338 & 261 \\ 35 & 42.599 \end{vmatrix}$ $\begin{vmatrix} 12.99 & 125 \\ 10.70 & 29.158 \end{vmatrix}$ $\begin{vmatrix} 28.528 & 333 \\ 29.158 & 19.106 & 367 \\ 19.96 & 20 \\ 19.76 & 19.106 & 367 \\ 19.785 & 26.89 \end{vmatrix}$ $\begin{vmatrix} 17.90 & 260 \\ 20.50 & 303 \\ 23.53 & 336 \\ 26.89 & 20.57 \end{vmatrix}$ $\begin{vmatrix} 42.048 & 278 \\ 42.338 & 261 \\ 42.599 & 10.70 \end{vmatrix}$ $\begin{vmatrix} 17.90 & 260 \\ 28.861 & 297 \\ 29.158 & 19.76 \end{vmatrix}$ $\begin{vmatrix} 19.106 & 367 \\ 19.473 & 312 \\ 19.785 & 26.89 \end{vmatrix}$ $\begin{vmatrix} 42.048 & 278 \\ 42.326 & 248 \\ 42.574 & 74.16 \end{vmatrix}$ $\begin{vmatrix} 69.64 & 221 \\ 71.90 & 221 \\ 74.16 & 74.16 \end{vmatrix}$ Mittl. Ort see $\delta$ , tg $\delta$ 1.051 +0.324 1.216 +0.691 1.733 - 1.415 1.011 -0.148 a, a' +3.4 -15.1 +3.7 -15.2 +1.9 -15.4 +2.9 -15.6			41.0/0	17.52 158	27.434 270	23.79	17.000	14.29	41.126 312	03.00 170
Dez. 5 $\begin{vmatrix} 41.730 & 315 \\ 42.045 & 293 \\ 25 & 42.338 & 261 \\ 35 & 42.599 \end{vmatrix}$ $\begin{vmatrix} 12.99 & 125 \\ 10.70 & 29.158 \end{vmatrix}$ $\begin{vmatrix} 28.528 & 333 \\ 29.158 & 19.106 & 367 \\ 19.96 & 20 \\ 19.76 & 19.106 & 367 \\ 19.785 & 26.89 \end{vmatrix}$ $\begin{vmatrix} 17.90 & 260 \\ 20.50 & 303 \\ 23.53 & 336 \\ 26.89 & 20.57 \end{vmatrix}$ $\begin{vmatrix} 42.048 & 278 \\ 42.338 & 261 \\ 42.599 & 10.70 \end{vmatrix}$ $\begin{vmatrix} 17.90 & 260 \\ 28.861 & 297 \\ 29.158 & 19.76 \end{vmatrix}$ $\begin{vmatrix} 19.106 & 367 \\ 19.473 & 312 \\ 19.785 & 26.89 \end{vmatrix}$ $\begin{vmatrix} 42.048 & 278 \\ 42.326 & 248 \\ 42.574 & 74.16 \end{vmatrix}$ $\begin{vmatrix} 69.64 & 221 \\ 71.90 & 221 \\ 74.16 & 74.16 \end{vmatrix}$ Mittl. Ort see $\delta$ , tg $\delta$ 1.051 +0.324 1.216 +0.691 1.733 - 1.415 1.011 -0.148 a, a' +3.4 -15.1 +3.7 -15.2 +1.9 -15.4 +2.9 -15.6	<b>T</b>		41.405	15.94 182	27.804 368	22.45	18.255	15.81 209	41.438 310	05.45 200
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Dez.	5	41.730 315	14.41			18.095 411	17.90 260	41.748 300	67.47 217
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			42.045 293	12.99 125	28.528		19.106 367	20.50 303	42.048 278	69.64 226
Mittl. Ort see $\delta$ , tg $\delta$ 1.051			42.338 261	11.74	28.861	19.96	19.473 312	23.53 236	42.326 248	71.90 226
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		35		10.70	29.158	19.76	19.785	26.89	42.574	74.16
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			38.070		24.314	50.72	15.253	13.50	38.312	51.56
			1.051			+0.691	1.733	- 1.415	1.011	
b, b' $ -0.02$ $-0.66$ $ -0.03$ $-0.65$ $ +0.07$ $-0.64$ $ +0.01$ $-0.63$			+3.4		+3.7	-15.2	+1.9	-15.4	+2.9	
	Ъ,	6	-0.02	- 0.66	-0.03	— o.65	+0.07	- o.64	+0.01	<ul><li>о.63</li></ul>

<sup>\*)</sup> Bei Stern 352), 353) und 354) lies Febr. 10

Ta	a 0°	355) 23 U	Irsae maj.	359) ψ Ve	elorum m	358) 9 Ur	sae maj.	357) 24 U	irsae maj.
	<sup>4</sup> 5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	9 <sup>h</sup> 26 <sup>m</sup>	+63° 18′	9 <sup>h</sup> 28 <sup>m</sup>	-40° 12'	9 <sup>h</sup> 28 <sup>m</sup>	+51°56′	9 <sup>h</sup> 29 <sup>m</sup>	+70° 5
Jan.	1	51.25	71 22	22.123 247	11.56	F2 000	47.25	T = T /	22.85 158
oun.	II	51.25 45	71.32	22.123 247	11.50 329	53.000 351	18 02 //	15.14 58	24.42 158
		51.70 37	72.64 174	22.370 194	14.85 329	53.351 288	40.18	15.72 46 16.18 24	24.43 200
	21	52.07 28	74.38 209	22.564 136	18.23 338	53.639 217	49.18	16.52 34	26.43 236
Fohr	31	52.35 17	76.47 <sub>234</sub>	22.700 75	21.61 330	53.856	50.69 178	16.52 21	28.79 <sub>261</sub>
Febr.	10	52.52 6	78.81 234 249	22.775 15	24.91 312	53.997 62	52.47 198	16.73 8	31.40 275
	19	52.58	81.30	22.790 40	28.03 288	54.059 16	54.45 208	16.81 6	34.15 278
	29	52.55	03.05 240	22.750 90	30.91 259	54.043 86	56.53	16.75	36.93 260
März	IO	52.42 22	80.34	22.660	33.50 224	53.957 148	58.61	16.57 30	39.62
	20	52.20	88.67 207	22.526 ,68	35.74 187	53.809 199	60.60		42.11
	30	51.91 34	90.74 173	22.358 193	37.61 <sub>146</sub>	53.610 237	62.41 157	15.88 39	44.31 182
Apr.	9	51.57 38	92.47	22.165 210	39.07 104	53.373 262	63.98 127	15.42	46.13 139
	19	51.19 39	1 0.2 XT	21.955 218	40.11 60	53.111	65.25 92	1 121.011	17.50
	29		04.72	21.737 219	40.71 16	52.838 271	66.17	14.37	18 12
Mai	9	FO 40	05.16	21.518 212	10.87	52.567 258	66.71 54	13.83	1882
	19	50.40 38 50.02 34	95.13 49	21.306 200	40.60 27	52.309 237	66.87 22	13.30 49	48.70 62
	29	49.68	04.64	21.106 181	39.90 110	52.072	66.65 60	12.81	48.08 109
Juni	8	49.37 26	02.70	20.925 158	38.80	51.865	66.05	12.37 44	16.00
0 02.22	18	10 TT	93.70 134	20.767	37.22	51.605 170	65 10 95	12.00	46.99 153
	28		92.36	20.635 102	37.32 182	51.695 131	65.10 127	12.00 30	45.46 193
Juli	8	48.91 14	90.65 203	20.035 102	35.50 210	51.564 87	63.83	11.70	43.53 228
Jun		48.77 8	88.62 230	20.533 69	33.40 232	51.477 41	62.27 181	11.48 13	41.25 256
	18	48.69 I	86.32	20.464 33	31.08 248	51.436 6	60.46 203	11.35 4	38.69 278
	28	48.68 6	03.79 270	20.431 6	28.60	51.442	58.43	11.31	35.91 206
Aug.	7	48.74	81.09 28,	20.437 46	20.04	51.494	56.23 222	11.36	32.95 307
	17	48.87	78.28 287	20.483 87	23.50	51.593 147	53.90	11.50	29.00 310
	27	49.06 26	75.41 287	20.570 131	21.05 225	51.740 192	51.48 248	11.73 31	20.78 309
Sept.	6	49.32 32	72.54 283	20.701 174	18.80	51.932 238	49.00 249	12.04 40	23.69 302
	16	49.64 38	60.71	20.075 217	10.83	52.170 282	40.51	12.44	20.07 288
	26	50.02 44	66.98 256	21.092	15.23	52.453 226	44.00	12.93 56	17.79 268
Okt.	6	50.46	64.42	21.349	14.09 64	52.779 266	41.69	13.49 62	15.11 242
	16	50.95 54	62.08 206	21.643	13.45 9	53.145 402	39.46 205	14.11 69	12.69 209
	26	51.49 58	60.02	27.068	13.36	53.547 432	37.41 181	14.80 74	10.60 172
Nov.	5	52.07	150.29	22.318 350 22.318 365	13.85	53.979	35.60	I T5.54 .	0.00 127
	15	52.67 61	56.94 90	22.683 370	14.92 162	54·433 <sub>467</sub>	34.08 117	16.30 79	7.61 80
	25	53.28 62		23.053 364	16.54 211	54.900 466	⊥ 22.OT	17.09 78	6.81 28
Dez.	5	53.90 59	$55.61 \frac{43}{6}$	23.417	18.65 255	55.366 <sub>453</sub>	32.12 79	17.87 75	6.53 25
	15	54.49 55	55.67	23.762 316	21.20 290	55.819 426	31.76 8	18.62 70	6.78 78
	25	55.04 50	56.24 57	24.078 316	24.10	56.245 384	21.84	19.32 63	7.56 130
	35	55.54	57.29	24.078 <sub>275</sub> 24.353	24.10 316	56.629	32.36	19.95	8.86
Mit+1	. Ort	40.21	02.26			FT 242		T2 70	44.40
sec 8		49.21 2.228	92.36	20.053	11.60	51.343	67.10	12.70	44.49
a,			+1.991	1.309	-0.845		+1.278	2.937	+2.762
b,		+4.7	-15.7		15.8		-15.8	+5.3	-15.9
υ,	0	-0.10	- o.62	+0.04	0.61	-0.07	— o.61	-0.15	- o.61

Τ:	ag	360) 10 Le	eonis min.	366) <b>9</b>	Antliae	<b>3</b> 67) ε	Leonis	369) ს	Carinae
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	9 <sup>h</sup> 30 <sup>m</sup>	+36° 39′	9 <sup>h</sup> 41 <sup>m</sup>	-27° 29′	9 <sup>h</sup> 42 <sup>m</sup>	+24° 2'	9 <sup>h</sup> 45 <sup>m</sup>	-64° 47′
Jan.	I	34.664 289	36.55	33.227 245	40.53 294	28.277 269	50.28	39.62 38	29.65 341
	II	34.953 240	36.54	33.472 <sub>201</sub>	43.47	28.546	49.55 73	40.00	33.00 260
	21	35.193 182	36.88 34	33.673 150	46.44	28.773	49.11	40.29	30.73
	31	35.376 123	37.55	33.823 97	49.30	28.950 123	48.98 = 15	40.50	40.54
Febr.	10	35-499 61	38.50	33.920 44	52.16 261	29.073 69	49.13 41	40.60	44.39 379
	19	35.560 <sub>1</sub>	39.67	33.964 7	54.77	29.142 16	49.54 62	40.60	48.18 364
	29	35.561	41.00	33.957 52	57.14 200	29.158 33	50.16	40.51	51.02 243
März	10	35.507 102	42.42	33.905 02	59.23	29.125	50.93 88	40.34	55.24
	20	35.405	43.85	33.813 133	01.01	29.050	51.81 93	40.10	58.35
	30	35.265 169	45.22 125	33.690 147	62-45 110	28.940 135	52.74 93	40.10 32 39.78 36	61.09 233
Apr.	9	35.096 186	46.47 108	33.543 163	63.55	28.805 152	53.67 88	39.42 40	63.42 188
	19	34.910 193	47.55 87	33.380 171	64.30 38	28.053	54.55 79	39.02 42	65.30 138
74.2	29	34.717 191	48.42 63	33.209 172	64.68	28.494	55.34 69	38.60	66.68 87
Mai	9	34.526 181	49.05 38	33.037 167	64.70 32	28.335 151	56.03	38.16 44	67.55 35
	19	34.345 163	49.43	32.870 157	64.38 66	28.184 138	56.58 40	37.71 43	67.90 19
	29	34.182	49.56	32.713 142	63.72	28.046	56.98 26	37.28 <sub>42</sub> 36.86 <sub>38</sub> 36.48 <sub>35</sub>	67.71 72
Juni	8	34.042	49.42 38	32.571	62.75	27.926	57.24 9	36.86 38	66.99 121
	18	33.929 82	49.04 62	32.448 102	61.48	27.828 74	57.33 6	36.48 35	65.78 168
T 1'	28	33.847 51	48.42 84	32.346 77	59.95 774	<sup>27.754</sup> 48	57.27	30.13 20	64.10 210
Juli	8	33.796	47.58 104	32.269 51	58.21 190	27.706	57.06	35.84 24	62.00 247
	18	33.779 17	46.54 122	32.218 22	56.31 202	27.685	56.69	35.60 <sub>18</sub>	59.53 275
	28	33.796	45.32 128	32.196	54.29 205	27.692 36	56.17 67	35.42 10	50.78 206
Aug.	7	33.848 86	43.94 152	32.205 41	52.24 202	27.728 65	55.50 82	35·3 <sup>2</sup> <sub>3</sub>	53.82 306
	17	33.934 121	42.41 165	32.246	50.22	27·793 <sub>96</sub>	54.68 97	35.29 6	50.76 307
	27	34.055 156	40.76	32.321	48.30 173	27.889 127	53.71 113	35·35 <sub>15</sub>	47.69 297
Sept.	6	34.211 190	39.00 185	32.432 148	46.57 146	28.016	52.58 127	35.50 22	44.72 275
	16	34.401	37.15	32.580 184	45.11	28.174	51.31	35.72 32	41.97 212
01.4	26	34.627 260	35.25 104	32.764 220	43.98 72	28.364 222	49.89 154	36.04 39	39.55 200
Okt.	6	34.887 293	33.31 192	32.984 254	43.26 28	28.586	48.35 <sub>16e</sub>	36.43 <sub>46</sub>	37.55 149
	16	35.180 322	31.39 188	33.238 284	42.98 21	20.039 282	40.70	36.89 <sub>52</sub>	36.06 91
	26	35.502 347	29.51 179	33.522 309	43.19 70	29.121 29.428 3°7 29.428 326	44.98 176	37.41 56	35.15 27
Nov.	5	1 35.049 266	27.72 ,62	33.831 226	43.89	29.428 326	43.22	37.97 -0	34.88 78
	15	30.215 278	20.09	34.157 <sub>335</sub>	45.08 165	29.754 220	41.40 169	30.50 50	35.26
70	25	1 30.593 200	24.05 118		46.73 206	30.093	39.79 156	39.15 58	30.31 167
Dez.	5	30.972 369	23.47 89	34.827 <sub>323</sub>	48.79 241	30.435 <sub>336</sub>	38.23 138	39.73 55	37.98 225
	15	37·34I <sub>348</sub>	22.58 56	35.150 301	51.20 267	30.771 319	36.85 116	40.28 50	40.23 277
	25 35	37.689 315 38.004	22.02 <sub>21</sub> 21.81	35.451 <sub>268</sub> 35.719	53.87 <sub>285</sub> 56.72	31.000 <sub>201</sub> 31.381	35.69 <sub>90</sub> 34.79	40.78 42	43.00 318 46.18
74.4.1						-	·		
Mittl. sec δ,		33.208	54.00	31.493	38.52	26.935	65.23	36.17	35.16
sec o,	-		+0.744	1.127	-0.520		+0.446	2.348	-2.124 -16.7
a, t			-15.9 - 0.61		-16.5		-16.5	+1.5 +0.12	-16.7 - 0.55
0, (		-0.04	- o.61	+0.03	— 0.57	-0.02	- o.56	-0.12	- o.55

T.	ıg	368) v Ui	rsae maj.	370) 6 Se	extantis	372) Grb	1586 UMaj	378) π I	Leonis
10	18	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	9 <sup>h</sup> 46 <sup>m</sup>	+59018'	9 <sup>h</sup> 48 <sup>m</sup>	-3° 57'	9 <sup>h</sup> 53 <sup>m</sup>	+73°9′	9 <sup>h</sup> 57 <sup>m</sup>	+8° 19′
Jan.	I	46.036	58.29 95	14.010 246	48.69 208	6.04 71	35.49 144	3.931 <sub>259</sub>	47.47 15
	11	46.468 432	59.24 140	14.256	50.77	6.75 59	36.93	4.190 221	45.91 13
	21	46.830 362	60.64 178	14.463 161	52.72	7.24	38.84	4.411	44.55
	31	47.111	62 42	14.624	52.73 179	7.34 46	$41.16_{262}^{232}$	4.411 176	47 44
ebr.	10	47.111 192	62.42 209	14.024 112	54.52 158	7.80 31	42.78	4.587 127	
Col.		47.303 100	64.51 231	14.736 63	56.10 134	8.11 16	43.78 282	4.714 77	42.58
	19*)	47.403 8	66.82	14.799 15	57.44 109	8.27 <sub>I</sub>	46.60 291	20 4.791 28	41.99
	29	47.411 78	109.24	14.814 28	58.53 84	8.26	49.51 286	4.819 16	41.64
lärz	10	47.333	71.07	14.786 65	59.37 60	8.11	52.37 271	4.803 56	41.51
	20	47.170 222	74.01	14.721	59.97 37	7.82	55.08 244	4.747 88	41.58
	30	46.954 274	76.16 187	14.626 95	60.34 16	7.42 51	57.52 209	4.659 112	41.81
pr.	9	46.680 310	78.03	14.508 133	60.50	6.91 58	59.61 166	4.547 129	42.17
	19	46.370 310	79.56 113	14.375	60.46	6.33 62	61.27	4.418 138	12.62
	29	16.040	80.60	14.235 141	60 25	5.71 64	60 45	4.280 139	42.16
Mai	9	45.703 337	8T 20	14.094	59.87	5.07 64	62.TT	ATAT	12.72
	19	45.375 328	8r 6r =	13.959 125	50.25	4·43 61	62.25	4.007 125	44.22
			10	_	-5	1	40		
	29	45.067	81.47 62	13.834	58.70 76	3.82	62.85	3.882	44.92
Juni	8	44.788 217	80.85 103	13.723 93	57.94 85	3.25 50	61.94 138	3.771 94	45.52
	18	44.547 196	79.82	13.630 74	57.09	2.75	60.56 182	3.677 75	46.09
	28	44.351 146	78.41	13.556 52	56.16 97	2.33 21	58.73	3.002	40.02
Juli	8	44.205 93	76.65 206	13.504 29	55.19 98	1.99 24	56.52 255	3.548 31	47.10
	18	44.112 38	74.59 231	13.475 4	54.21	1.75 15	53.97 282	3.517 7	47.51
	28	44.074 18	72.28 251	13.471 = 4	52.24	1.60	51.15 304	3.510 18	47.84
Aug.	7	44.092 76	69.77 268	13.492 48	52.33 82	$1.56 \frac{4}{7}$	48.11 319	2.528	48.06
	17	11 168	67.09 278	T2.540	51.51 67	1.63 7	44.92	2.572	48.15
	27	44.301 192	64.31 284	13.617 77	50.84 48	1.81 28	41.65 330	3.646 73	48.08
Sept.	6	44.493 248	61.47 284	13.723 136	50.26	2.09 38	38.35 325	3.747 132	47.84
	16	44.741 304	58.63 280	13.859 168	SO.TT	2.47 49	35.10 314	3.879 164	47.20
	26	45.045 358	55.83 280	14.027	50.T2	2.96 49		4.043 195	16.72
Okt.	6	45.403 410	53.15 252	14.226	50.45	3.54 66	20.00	4.238 226	15.82
	16	45.813 456	50.63 252	14.456 230	51.08 95	4.20	26.29 <sub>240</sub>	4.464 255	44.69
	26	450			93	1			
Nov.		46.269	48.33 201	14.714 282	52.03 126	4.95 81	23.89 202	4.719 281	43.34
.,,,,,	5 15	46.764 495	46.32 166	14.996 301	53.29 154	5.76 87	21.87 158	5.000 302	41.79
	25	47.290 546 47.836 546	44.66	15.297 312	54.83 <sub>178</sub>	6.63 89	20.29 109	3.30	40.09
Dez.	-25 -5	48.386 550	43.40 81	15.609 315	56.61 196	7.52 90	19.20 <sub>56</sub> 18.64	5.617 321	38.27 <sub>1</sub> 36.40 <sub>1</sub>
ocu,	J		42.59 33	15.924 309	58.57 209	8.42 89	10.04	5.938 317	20:40 1
	15	48.926	42.26	16.233 292	60.66	9.31 84	18.65	6.255 303	34.55 1
	25	49.438 469	42.43 67	10.525 266	62.79 211	10.15 77	19.22	0.330 278	32.76
	35	49.907	43.10	16.791	64.90	10.92	20.35	6.836	31.11
Mitt	l. Ort	44.400	79-55	12.588	40.89	3.80	58.12	2.627	58-37
	tg δ	1.960	+1.686	1.002	-0.06g	3.453	+ 3.305	1.011	+0.146
	a'	+4.3	-16.7	+3.0	—16.8	+5.4	-17.0	+3.2	-17.2
	b'	-0.09	- o.55	0.00	- 0.54	-0.19	-0.53	-0.01	- 0.51

<sup>\*)</sup> Bei Stern 378) lies Febr. 20.

Т.	ag	379) n	Leonis	380) a I	Leonis	381) λ	Hydrae	382) 191 G.	Velorum
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	10 <sup>h</sup> 4 <sup>m</sup>	+17° 2'	10h 5	+12°15′	10 <sup>h</sup> 7 <sup>m</sup>	-12° 3′	10 <sup>h</sup> 12 <sup>m</sup>	-41°49′
Jan.	ı	5.047 274	68.51	11.946 268	28.54 141	41.118 259	29.50 240	14.744 298	23.52
	II			12.214 231	27.13	41.377 221	31.90 240	15.042 251	26.62
	21	5.556 235	66 AT	12.445 185	25.00	41.598	34.25 223	15.293	3-9
	31	5.745	65.78	12.630	25.05	41.775 129	36.48 205	15.488 136	22 28 330
Febr.	10	5.885 88	65.44 6	12.767 87	24.42 37	41.904 79	38.53 184	15.624 77	36.63 <sub>325</sub>
	20	5.973 38	65.38	12.854 37	24.05	41.983 32	40.37	15.701 19	39.88
	29	6.011 9	65.57 39	12.891 9	23.94	2342.015 32	41.97	$^{124}$ 15.720 $\frac{19}{35}$	42.95 284
März	10	6.002	65.96 55	12.883	24.05 29	42.003 51	43.31 108	15.685 8	45.79 255
	20	5.951 %	66.51 67	12.834 82	24.34 44	41.952 82	44.39 81	15.604	48.34 222
	30	5.865	67.18 74	12.751 109	24.78	41.869 108	45.20	15.482	50.56 185
Apr.	9	5.753 130	67.92 76	12.642	25.32 61	41.761 125	45.75 30	15.327	52.41 145
	19	5.623	68.68 76	12.516	25.93 64	41.636	46.05	15.148	53.86 104
	29	5.482	69.44	12.379	26.57 65	41.500	46.10 =	14.953	54.90 62
Mai	9	5.330 IAI	70.15 65	12.240	27.22 62	41.301 128	45.93 39	14.748	55.52 18
	19	5.197	70.80	12.104 128	27.85 60	41.223	45.54 58	14.541 204	55.70 25
	29	5.066	71.37 47	11.976	28.45 55	41.092	44.96 77	14.337 195	55.45 67
Juni	8	4.948	71.84 37	11.861	29.00 48	40.971	44.19	14.142	54.78 107
	18	4.847 81	72.21	11.762 81	29.48	40.865	43.25 108	13.961 162	53.71 145
_	28	4.766 60	72.46	11.681	29.89	40.775 70	42.17 118	13.799	52.26 177
Juli	8	4.706	72.59	11.622 37	30.22	40.705 50	40.99 126	13.660 113	50.49 205
	18	4.669 12	72.59	11.585 14	30.45 12	40.655 27	39.73 129	13.547 81	48.44 227
	28	4.657	72.46 28	11.571	30.57 -	40.628 <sub>1</sub>	38.44 128	13.466	46.17 242
Aug.	7	4.670 41	72.18	11.582 38	30.56	40.627	37.16	13.419 8	43.75 210
	17	4.711 60	71.75 60	11.620	30.41 31	40.652	35.95	13.411 34	41.26 247
	27	4.780 99	71.15 78	11.685 95	30.10 49	40.706 85	34.85 92	13.445 78	38.79 235
Sept.	6	4.879 130	70.37 95	11.780 125	29.61 69	40.791	33.93 69	13.523 125	36.44 215
	16	5.009	69.42	11.905	28.92	40.908	33.24 41	13.648	34.29 185
01.	26	5.171	68.28	12.063	28.02	41.060 185	32.83	13.820	32.44 147
Okt.	6	5.300 228	00.95	12.253	26.92	41.245 219	32.74 27	14.040 265	30.97 101
	16	5.594 258	05.40 164	12.475 253	25.62	41.464 250	33.01 64	14.305 306	29.96 49
	26	5.852 286	63.82	12.728 280	24.12 165	41.714 277	33.65 101	14.611 340	29.47 7
Nov.	5	6.138 308 6.446 324	02.07 _0_	13.008	22.47	41.991	34.66	14.951 365 15.316 381	29.54 63
	15	6.446 324	00.25 184	13.310 318	20.70 _0_	42.291	36.03 170	15.316 381	30.17 119
D	25	6.770	50.41 180	13.628	18.85	42.000 220	37.73	15,007 -00	31.36 173
Dez.	5	7.101 331	56.61 170	13.953 322	17.00 180	42.926 316	39.70 218	16.083 377	33.09 221
	15	7.430 216	54.91	14.275 310	15.20	43.242 302	41.88	16.460	35.30 262
	25	7.740 203	53.38	14.585 286	13.50	1 43·544 <sub>208</sub>	44.20	16.815 322	37.92 294
	35	8.039	52.05	14.871	11.98	43.822	46.59	17.137	40.86
	. Ort	3.815	81.63	10.702	40.36	39.704	24.60	12.801	26.70
sec δ		1.046	+0.307	1.023	+0.217	1.023	-0.214	1.342	-0.895
a,		+3.3	-17.5	+3.2	-17.6	+2.9	-17.7	+2.5	-17.9
b,	6'	-0.02	— o.48	-0.01	- o.48	+0.01	— o.47	$\pm$ 0.05	— 0.45

	ag	384) ζ	Leonis	383) à Ur	sae maj.	386) μ U	rsae maj.	387) 30 H.U	Jrsae maj.
	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	10h 13m	+23°42'	10 <sup>h</sup> 13 <sup>m</sup>	+43° 12′	10 <sup>h</sup> 18 <sup>m</sup>	+41° 47′	10 <sub>p</sub> 10 <sub>m</sub>	+65°51′
Jan.	1	22.539 290	46.52	30.321 348	33.97	46.832 346	48.28	51.05	51.77 86
	II	22.829 252	45 50 93	30.669 348	33.04	47.178 301	48.T4	51.62 57	52.63 138
	21	23.081 206	44.08	30.971 246	34-35 81	47.479 249	18.44	52.10 40	54.01 184
	31	23.287	44.71	31.217 185	35.16	47.728 188	49.15 107	52.50 30	55.85
Febr.	10	23.442 102	44.75 4	31.402	36.33	47.916	50.22	52.80 19	58.07 250
	20	23.544 49	45.08	31.521 54	37.80 169	48.040 <sub>61</sub>	51.60 161	26 52.99 8	60.57
	29	23.593	45.67 78	31.575	39.49 182	48.101	53.21	53.07 4	63.25 274
März	10	23.593 45	46.45 93	31.566 66	41.31	48.100	54.98 182	53.03	65.99 269
	20	23.548	47.38	31.500	43.18	48.043	56.81	52.90	68.68 253
	30	23.466	48.39 103	31.386	45.02	47.938 143	58.62	52.67 30	71.21 227
Apr.	9	23.354 133	49.42 102	31.233 181	46.75	47.795 172	60.33	52·37 <sub>36</sub>	73.48 192
	19	23.221 145	50.44 95	31.052 199	40.20	47.623 190	01.00	52.01 40	75.40 151
25.	29	23.076	51.39 84	30.853 207	49.57 102	47.433 199	63.20 106	51.61 42	76.91 106
Mai	9	22.926	52.23 71	30.646 206	50.59 70	47.234 198	64.26	51.19 42	77.97 58
	19	22.777 140	52.94 57	30.440 197	51.29 36	47.036 191	65.01 43	50.77 42	78.55 8
	29	22.637 128	53.51 40	30.243 182	51.65	46.845	65.44	50.35 40	78.63
Juni	8	22.509 112	53.91 23	30.061 160	51.68 =	40.008	65.55 22	49.95 26	78.22
	18	22.397 92	54.14 5	29.901 134	51.38 62	40.511	65.33	49.59 31	77.34 134
~ 11	28	22.305 71	54.19 13	29.767 106	50.76	46.377 106	64.79 8	49.28 26	76.00
Juli	8	22.234 47	54.06 30	29.661 74	49.83 121	46.271 77	63.96	49.02 21	74.25 211
	18	22.187 22	53.76	29.587 41	48.62	46.194 44	62.84 139	48.81	72.14 244
	28	22.165 4	53.29 65	29.546 6	47.15	46.150	01-45 162	48.67	09.70
Aug.	7	22.169 4	52.64 82	29.540 31	45.44 <sub>101</sub>	46.139 =	59.83 182	48.60	00.99 202
	17	22.201 62	51.81	29.571 60	43.53 208	46.163	58.00	48.60	04.07 307
	27	22.263 93	50.80 118	29.640 109	41.45 223	46.224 100	55.99 217	48.67 15	61.00 318
Sept.	6	22.356	49.62	29.749 149	39.22	46.324 140	53.82 229	48.82 22	57.82 321
	16	22.481	40.27	29.898	30.88	46.464 180	51.53 228	49.04 20	54.01 218
	26	22.040	40.70	30.088	34.47	46.644	49.15	49.33 26	31.43 000
Okt.	6	22.834 228	45.10 178	30.320	32.03	46.866 262	46.73	49.69 44	48.34 293
	16	23.062 260	43.32 188	30.594 312	29.60	47.128 302	44.31 237	50.13 50	45.41 270
	26	23.322 291	41.44 193	30.906 <sub>347</sub>	27.25 223	47.430 338	41.94 226	50.63 55	42.71 239
Nov.	5	23.013	39.51	31.253	25.02	47.768 367 48.135 390	39.68 200	51.10 61	40.32
	15	23.929	37.57 188	31.030 200	22.97	48.135 390	37.59 185	51.79 64	30.29 160
_	25	24.202 212	35.09 178	410	21.10 118	40.545 402	35.74 156	52.43 66	36.69 110
Dez.	5	24.005 3+3	33.91 160	32.439 410	19.70 112	48.927 403	34.18	53.09 66	35.59 58
	15	24.948 331	32.31 137	32.849 396	18.58	49-330 392	32.97 <sub>81</sub>	53-75 64	35.01 2
	25	25.279 309 25.588	30.94 110	33.245 271	17.87 28	49.722 367	32.16	54·39 60	34.99 53
	35	25.588	29.84	33.616	17.59	50.089	31.77	54.99	35.52
Mittl		21.380	61.28	29.160	53.18	45.719	67.24	49.71	74-44
sec δ		1.092	<b>0.439</b>		+0.940		+0.894	2.446	+2.233
a,		+3.3	-17.9	+3.6	-17.9		-18.1	+4.3	18.2
b,	b'	-0.03	- 0.45	—o. <b>o</b> 6	— o.45	-0.05	- 0.43	-0.13	- o.42

- т	ag	389) µ	Hydrae	391) J	Carinae	392) a 1	Antliae	390) 3 Le	onis min.
	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	10 <sup>h</sup> 23 <sup>m</sup>	-16° 31'	10 <sup>h</sup> 23 <sup>m</sup>	-73°43'	Ioh 24 <sup>m</sup>	-30°45'	10 <sup>h</sup> 24 <sup>m</sup>	+37° o'
Jan.	I	12.596 272	48.81 253	17.31 63	23.95 303	25.808 287	40.64 287	26.246 222	37.21
	II	12.868 272	51.34 252	T7.04		26.095 246	43.51 298	26,578	26.80
	21	13.103 235	53.86 252	18.40	30.39 366	26.341 199	40.49	26.868 241	26.8T
	31	13.294	56.30 229	18.85 25	34.05	20 540	49.48 294	27.109 185	27 22 41
Febr.	10	13.438	58.59 210	19.10 12	37.88 389	26.687 94	52.42 281	27.294 125	38.00 78
	20	73		19.22		26.781			109
		13.580 47 13.580 2	60.69 188	27 10.20 2	41.77 <sub>385</sub> 45.62 <sub>272</sub>	27 26.824 43	55.23 261	27.419 66 27.485 8	39.09 135
März	29	13.580 2	62.57 162	19.20	45.02 373	26.819 40	57.84 238		40.44 153
1/1:01.2	20	13.582 37	64.19	19.05 26	49.35 352	26 220 49	60.22	27.493 44	41.97 162
		13.545 72	65.54 108	18.79 38	32.01 224	26.770 85	62.32	27.449 89	43.59 164
	30	13.473 98	66.62 80	18.41 46	56.11 289	26.685 114	64.11 145	27.360 125	45.23 159
Apr.	9	13.375 118	67.42	17.95 54	59.00 250	26.571 137	65.56 112	27.235 153	46.82
	19	13.257	67.94 25	17.41 4	01.50	20.434	66.68	27.082	48.28
	29	13.126	68.19	16.81 65	03.54	26.282	67.44	26.912	49.56
Mai	9	12.989	68.19 26	10.10	05.09	26.121 164	67.84	20.733	50.62 81
	19	12.851 135	67.93 50	15.48 68	66.13 49	25.957 162	$67.88 = \frac{1}{31}$	26.554 174	51.43 53
	29	12.716 126	67.43	14.80 69	66.62	25.795 154	67.57	26.380 161	51.96 24
Juni	8	12.590 116	66.72	14.11 66	66.57	25.641 144	66.02	26.219	52.20 6
	18	12.474 101	65.80 110	13.45	65.98	25.497 128	65.94	26.075 123	52.14
	28	12.373 84	64.70	12.83	64.86	25.369 111	64.67 <sub>153</sub>	25.052	ET 80 3+
Juli	8	12.289 65	63.46	12.26 49	63.25 206	25.258 89	63.14 175	25.853 73	51.18 88
	18	12.224	1					/3	
	28	Ta 707 43	62.10 60.68 144	11.77 <sub>41</sub> 11.36 <sub>31</sub>	61.19 244	25.169 65 25.104 27	61.39 191	25.780 43	50.30
Aug.		10.760	50.00 144	11.30 31	58.75 275	25 265 3/	59.48 201	25.737 14	49.17 137
Aug.	7	· ·	59.24 141	11.05 19	56.00 298	25.067 6 25.061 37	57.47 205	25.723 18	47.80
	17	12.171	57.83	/	53.02 310	25.001 27 25.088 6r	55.42 200	25.74I <sub>52</sub>	46.23
	27	08	56.51 115	10.79 7	49.92 312	ده	53.42 188	25.793 <sub>88</sub>	44.46 194
Sept.	6	12.276 103	55.36 94	10.86	46.80	25.153 105	51.54 168	25.881 <sub>125</sub>	42.52 208
	16	12.3798	54.42 66	11.06	43.70 28r	25.258	49.86	26.006	40.44
0.7	26	12.517	53.76 34	11.40 46	40.97	25.403 187	48.46	26.170	38.24 227
Okt.	6	12.691	53.42	11.40 46	38.48	25.590	47.42 63	20.373	35.97 222
	16	12.902 244	53.44 42	12.45 70	36.43	25.817 265	46.79 16	20.010 281	33.65 230
	26	13.146	53.86 83	13.15	34.89 95	26.082 298	46.63	26.897 315	31.35 225
Nov.	5	13.421 300	54.69 122	13.92 0.	33.94 21	26.280	46.96 83	27.212 345	20.10
	15		55.91 158	14.76 87	$33.63 \frac{3}{36}$	26.705 325 27.048	47.79	27.557 <sub>367</sub>	26.98
	25	14.038	57.49 191	15.03 86	33.99 102	27.048 350	49.11	27.924 <sub>280</sub>	25.04 169
Dez.	5	14.363 324	59.40 217	16.49 83	35.01 <sub>165</sub>	27.398 337	50.88 217	28.304 383	23.35 138
	15	14.687 312	61.57 236	17.32	36.66	27.745	53.05 249	28.687 373	21.97 104
	25	14.999 290	63.93 248	18.10 70	38.89 275	28.078 333	55.54 275	29.060 373	20.93 64
	35	15.289	66.41	18.80 <sup>70</sup>	41.64	28.384	58.29	29.411	20.29
Mittl	. Ort.	11.199	45.84	12.62	33.47	24.192	41.76	25.182	55.14
sec δ.			-0.297	3.568	-3.425		-0.595		+0.754
a,	_		-18.3	+1.2	-18.3		—18.3	+3.5	-18.3
b,			- 0.4I	+0.21	- 0.41		- 0.4I	0.05	- o.41

Ta	ng	393) 196 0	. Carinae	394) 36 Ui	rsae maj.	395) 9 H.	Draconis	404) 33 S	extantis
		AR.	Dekl.	AR.	Dekl_	AR.	Dekl.	AR.	Dekl.
19	40	Ioh 25 <sup>m</sup>	-58° 25'	10 <sup>h</sup> 26 <sup>m</sup>	+56° 16′	10 <sup>h</sup> 29 <sup>m</sup>	+76° o'	10 <sup>h</sup> 38 <sup>m</sup>	-1° 25′
Jan.	I	42.913 395	49.75 312	49.119 442	58.67	64.50	59.00 110	22.172	39.31 <sub>204</sub>
	II		52.87 343	49.561	50.08	65.41	60.10	22 457 -/2	41.35
	21	43.639 331	56.30 343 56.30 361	49.950 323	50.00	66 20 1	61.74 212	22 608 44/	
	31	43.897 181	59.91	50.273 323 246	61.36	66.85	63.86	20004	43.20 <sub>173</sub> 44.99 <sub>150</sub>
Febr.	10	44.078 102	63.62 371	50.519 163	63.13 208	67.35 31	66.38 252	23.066	46.49 126
	20	44.180 25	67.33 262	50.682 80	65.21 230	67.66	60.18	23.181 67	47.75 100
	29*)	44.205	1 10.95 215	<sup>28</sup> 50.762 1	67.51 242	$67.79 \frac{3}{5}$	72.16	23.248 23	48.75
März	10	44.157 113	74.40 343	50.761 -8	69.93 242	67.74	75.18 294	23.271	49.50 50
	20	44.044	77.60 289	50.683	72.35 234	67.52 38	78.12	22.254	50.00 28
	30	43.873 220	80.49 253	50.539 199	74.69 215	67.14 51	80.88 276	23.203 80	50.28 7
Apr.	9	43.653 250	83.02	50.340 242	76.84 180	66.63 63	83.33 207	23.123 100	50.35 10
	19	1 43.394 280	85.15	50.098	78.73 +66	66.00 70	85.40	23.023	50.25 26
	29	43.105	86.82	49.820 280	80.29	65.30 75	87.01	22.909	49.99 39
Mai	9	42.795	88.02	49.537 293	81.46 75	64.55 78	88.12	22.787	49.60 50
	19	42.474 325	88.73 20	49.244 287	82.21 32	63.77 77	88.69 3	22.662	49.10 60
	29	42.149 319	88.93 30	48.957 270	82.53	63.00 74	88.72	22.540 116	48.50 68
Juni	8	41.830	88.63	48.687	82.42	62.26 69	88.20	22.424 107	47.82 73
	18	41.524 .06	87.84	48.440 216	81.87 96	61.57 62	87.16	22.317	47.09 77
	28	41.238	86.57	48.224	80.91	60.95	85.62	22.223 79	46.32 79
Juli	8	40.980 221	84.86 209	48.045 139	79.56 170	60.41 43	83.04 238	22.144 63	45.53 78
	18	40.759 177	82.77 242	47.906 <sub>96</sub>	77.86 201	59.98	81.26	22.081	44.75 76
	28	40.582 128	80.35 267	47.810 48	75.85 230	59.65 21	78.53 301	22.038 43	43.99 68
Aug.	7	40.454 70	77.68 282	47.762	73.55 252	59-44 9	75.52 323	22.017 =	43.31 59
	17	40.384 8	74.85 291	47.763	71.03 270	50.25	72.20 323	22.019 28	42.72 45
	27	40.376 = 59	71.94 287	47.814 104	68.33 284	59.39 16	68.90 339	22.047 58	42.27 28
Sept.	6	40.435 130	69.07 273	47.918 159	65.49 293	59.55 30	65.43 349	22.105 88	41.99 7
	16	40.565	66.34	48.077	02.50 206	59.85 42	01.94 344	22.193	41.92 18
	26	40.766	03.85	48.291 268	59.00	60.27	20.20	22.315	42.10
Okt.	6	41.037 226	61.72	48.559	56.68	60.81 66	55.19	22.473	42.54 73
	16	41.373 396	60.03 116	48.882	53.84 269	61.47 78	52.09 283	22.665 227	43.27 102
37	26	41.769 446	58.87 57	49.256	51.15 246	62.25 87	49.26	22.892 258	44.29 131
Nov.	5	1 42.215	$58.30 \frac{37}{5}$	1 49 077	48.69 217	63.12	46.78	L 23.T50 a	45.60 157
	15	42.097	58.35 68	50.137	46.52 181	64.07	44.72	23.435	47.17
	25	1 73 210	1 223 131	30.027 508	44.71 140	65.08 105	43.15 103	1 -3.14. 318	40.90 196
Dez.	5	43.712 498	60.34 190	51.135 511	43.31 93	66.13 105	42.12 45	24.058 321	50.92 207
	15	44.210	62.24	51.646	42.38 42	67.18 102	41.67 15	24.379 313	52.99 211
	25	44.680 426 45.106	04.66	52.145	41.96 -	68.20	41.82	24.692	55.10 208
	35	45.106	67.53	52.615	42.05	69.17	42.57	24.986	57.18
Mittl		40.285	57.27	48.018	80.25	62.96	82.60	21.007	32.32
$\sec \delta$	-	1.910	-1.628	1.802	+1.499	4.140	+4.018	1.000	-0.025
a,		+2.2	-18.4	+3.9	-18.4	+5.1	-18.5	+3.1	-18.8
b,	b'	+0.10	0.40	-0.09	— o.4o	-o.25	— o.38	0.00	— 0.35

<sup>\*)</sup> Bei Stern 404) lies März 1.

т	ag	406) <b>3</b>	Carinae	407) 42 Le	eonis min.	408) μ	Velorum	409) 53	Leonis
_	u <sub>D</sub>	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	10 <sup>h</sup> 40 <sup>m</sup>	-64° 4'	10 <sup>h</sup> 42 <sup>m</sup>	+30° 59′	10 <sup>h</sup> 44 <sup>m</sup>	-49°6′	10 <sup>h</sup> 46 <sup>m</sup>	+10°51′
Jan.	I	51.65 48	37.05 297	32.914 323	39.51 80	13.034 360	2.56 <sub>297</sub>	7.288 291	36.87 162
	II	52.13 40	40.02 332	33.237 289	28.7T	13.394 311	5.53 323	7.579 260	
	21	52.53 33	43.34 357	33.526 245	28 20 41	13.705 254	8.76	7.839 220	22 80 -3"
	31	52.86 33	46.91 373	33.771 194	00 00	13.959 193	6 340	8.059 175	33.87 111 32.76 82
Febr.		53.09 23	50.64 378	33.965	38.64 36	14.152 128	15.64 348 15.64 347	8.234 127	21 04
	20			24 704	20.24	0 .	347	Q 26T	27.42
Marz	20 I	53.24 5	54.42 375	34.104 <sub>84</sub> 34.188 <sub>31</sub>	39.34 98	T4 247	19.11 338	8.361 <sub>80</sub> 8.441 <sub>22</sub>	31.42 31.18
7(1112)	10	53.29 3	58.17 362	34.219 31	40.32	3 14.345 5	22.49 320	$\frac{38.441}{8.474} = \frac{33}{9}$	31.19
	20	2 53.26	61.79 342	34.200 61	41.53 136	14.350 50	25.69 297	8.465	24
		53.15 18	03.21 214	Ų1	42.89	14.300 98	28.66 267		31.42
	30	52.97 24	00.35 281	34.139 97	44.33 145	14.202	31.33 234	8.420 74	31.83
Apr.	9	52.73 30	71.16 243	34.042	45.78 139	14.063	33.67	8.346	32.37 65
	19	52.43 33	73.59	33.918	47.17	13.890	35.64	8.248	33.02
	29	52.10 27	75.58	33.775	48.46	13.691	37.19 112	8.135 121	33.73 72
Mai	9	51.73 28	77.11	33.621	49.58	13.474 228	38.31 68	8.012	34.45 73
	19	51.35 40	78.14 51	33.463	50.50 71	13.246	38.99 21	7.886	35.18 69
	29	50.95 40	78.65	33-308	51.21 46	13.012	39.20	7.762	35.87 65
Juni	8	50.55	78.64 53	33.161	51.67 21	12.780	38.96	7.643 109	36.52 58
	18	50.10	78.11	33.025	51.88	12.554 272	38.26	7 524	27.10
	28	49.79	77.08 151	32.906	51.84 4	12.341	37.14	7.437 83	37.61 51
Juli	8	49.45 30	75-57 194	32.807 79	51.54 54	12.147 169	35.62 187	7.354 65	38.03 30
	18	49.15 26	73.63 231	22.728	~ T 00	11.078	33.75 218	7 280	28.22
	28	48.89	71.32 262	32.672 55	EO 22	11.838	31.57 <sub>240</sub>	7.242	28 52
Aug.	7	48 50	68.70 283	22.644	40.2T		29.17 256	7 217 -3	28 58 -
	17	48.57 6	65.87 296	22.644	47.98	TT 672	26.61 263	7.215	28 18
	27	48.51 -3	62.91	32.674 30	46.54 164	$11.655 \frac{17}{35}$	23.98 260	7.240 52	38.20 46
Sept.	6	48.54 12		32.736	44.90 181	17.600	21.38 247		27.74
1	16	48.66	59.92 <sub>290</sub> 57.02 <sub>269</sub>	32.833	43.09 197	11.779	18.91	7.292 84 7.376 <sub>118</sub>	25.00
	26	48.85 29	54.33 239	32.967 173	41.12	I II Oab	16.67	7 404	26.10
Okt.	6	49.14 37	51.94 198	33.140 212	39.02 210	T2 T20	T4 76	7.494 153 7.647 188	25.08
	16	49.51 44	49.96	33.352 249	36.83 225	12.130 260	T2 26 150	7.835 224	35.08 <sub>133</sub> 33.75 <sub>154</sub>
	26		140				101		
Nov.	26	49.95 51	48.48 91	33.601 286	34.58 226	12.702 357	12.25 47	8.059 257	32.21
140 V	5	50.46	47.57 29	33.887 317	32.32 220	13.059	11.78	0.310	30.49 186
	15	51.01 59	47.28 36	34.204 341	30.12 200	13.453 410	11.89 71	8.601 308	28.63 197 26.66
Dez.	25 5	51.60 59 52.19 59	47.64 100 48.64 162	34.343 257	28.03 <sub>191</sub> 26.12 <sub>167</sub>	13.0/2 431	12.60	0.909 222	200
	3			34.902 364		14.303 428	13.89 184	9.231 327	24.66
	15	52.78 52.33 55	50.26 218	35.266 <sub>358</sub>	24.45 137	14.731 412	15.73 232	9.558 322	22.69 189
	25	55.33 52	52.44 <sub>268</sub>	35.024	23.08 102	15.143 382	18.05 273	9.880 306	20.80 173
	35	53.85	55.12	35.964	22.06	15.525	20.78	9.880 306	19.07
Mittl	. Ort	48.67	46.58	31.970	55.89	11.009	9.44	6.259	47.46
sec δ,		2.288	-2.058		+0.601	1.527	-1.155	1.018	+0.192
a,		+2.1	-18.9		-18.9	+2.6	-19.0	+3.2	-19.o
Ъ,	b'	+o.13	- 0.34		- o.33	+0.07	- 0.32	-0.01	- o.32

Т	ag	415) 239 G	. Velorum	416) β Ui	sae maj.	417) α U	Irsae maj.	418) χ	Leonis
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	10h 57m	-41°54'	10 <sup>h</sup> 58 <sup>m</sup>	+56°41′	II <sub>p</sub> o <sub>m</sub>	+62° 3′	IIh Im	+7° 39′
Jan.	1	25.443 342	7.44 283	14.746 471	54.31	3.18 54	68.68	50.309 296	29.58 178
	II	25.785 301	10.27 306	15.217 426	54.28		68 02 24	56.605 267	25 80
	21		12.22 306	15.643 367	55.00	4.20	69.73	Eb X72	26 24 15
		26.238 252	13.33 320	16.010		4.62 42	71.07	E7 T02	24.92
Fahr	31	26.338 199	16.53 325	16.010 296	56.13 159	4.02 34	71.07 180	57.102 186	24.92
Febr.	10	26.537 142	19.70 322	16.306 217	57.72 197	4.96 25	72.87 219	57.288	23.88 7-
	20	26.679 85	23.00	16.523	59.69 227	5.21	75.06 247	57.429 94	23.14
März	I	26.764 31	20.12	10.058	6r.96 245	5.36 6	77.53 265	57.523 48	22.68
	10	26.795 19	29.06	16.711	04.41	5.42	80.18	57.571 6	22.48
	20	26.776	31.77 242	16.686	95 255	5.38	82.89 266	57.577 30	22.52
	30	26.714 100	34.20 212	16.590 158	69.46 238	5.26	85.55 251	57.547 60	22.76
Apr.	9	26.614	36.32	16.432 208	71.84 216	5.07	88.06 226	57.487 84	23.17
	19	20.483	38.09 139	16.224 247	74.00 187	4.82	90.32	57.403 102	22 70
	29	1 20.320		15.977 272	75.87 151	4.52 33	92.25	57.301 114	24 22
Mai	9	26.156 183	40.48	15.705 286	77.38 110	4.19 35	93.79 109	57.187	25.00
	19	25.973 189	41 07 39	15.419 290	1 5 Q 4 Q	3.84 36	94.88 63	57.068 119	25.70
			10	_			93		/
	29	25.784 191	41.25	15.129 283	79.16	3.48 35	95.51 15	56.947 117	26.40
Juni	8	25.593 786	41.01 64	14.846 260	79.38 =	1 3.13	95.66	56.830	27.09 6
	18	25.407	40.37	14.577 246	79.15 66	2.00 21	95.32 80	56.719 102	27.74
	28	25.230	39.35 138	14.331	78.49 109	2.49 27	94.52 126	56.617 90	28.33
Juli	8	25.067 144	37.97 169	14.114 183	77.40 149	2.22 23	93.26	56.527 75	28.85
	18	24.923 122	36.28	13.931	75.91 185	1.99	91.59 205	56.452	29.29
	28	1 24 SOT	34.31 217	13.787	74.06	1.80 13	89.54 238	56.202	29.63
Aug.	7	24.708 93	32.14 230	L T2 684	71.88 246	1.67 8	87.16 267	56 251	20.84
	17	24 640	29.84 236	T2.628	69.42 269	1 50	84.40	56.337	20.01
	27	24.628 21	27.48 232	T3.62T	66.73 289	1.56	81.58 309	56.344 36	29.81
Sept.	6	0.00		45		1.60	78 40	56.000	
behe.	16	24.650	25.16	13.666	63.84 302	1.00	78.49 321 75.28 328	56.446	29.53
	26	24.720 119	22.96	13.766	60.82 310	1.71	$\begin{vmatrix} 75.28 \\ 72.00 \end{vmatrix}$ 328		
Okt.	6	24.839 170	20.97 168	13.924 215	1 31.12 212	1.88 24	69 72 327	56.547 136	28.33 96
OKU.	16	25.009 221	19.29	14.139 274	54.59 308	2.12 31	68.73 320	56.683	27.37
	10	25.230 270	18.00 83	14.413 332	51.51 296	2.43 37	05.53 306	56.856 209	26.18
	26	25.500 313	17.17 32	14.745 386	48.55 278	2.80 44	62.47 283	57.065 245	24.76
Nov.	5		1 T 6 8 # 1	1 15.131	45.77	3.24	59.64 254	57.310	23.12
	15	26.162 349 26.538 376	17.07 77	1 -5.504 4-4	43.25 218		57.10 216	57.505 200	21.30
	25		-1 -T T2T	1 20.00	41.07 178	4.40	54.94 172	57.005 317	19.35 203
Dez.	5	26.929 393	19.15 180	16.537 514	39.29	4.83 57	53.22	58.202 317	17.32 204
	15	27.322 383	20.95 227	17.051 512	27.08	5.42 58	52.00	58.527 322	15.28 199
	25	27.705 360	23.22 261	17.563 493	27.18	6.00	ET 22	58.849 308	13.29
	35	28.065	25.83	18.056	36.93	6.00 56 6.56	51.23	59.157	11.42
Alteria									.0
	Ort	23.736	13.39	14.023	76.04	2.49	91.19	55.347	38.73
sec 8		1.344	-o.897	1.822	+1.523	2.135	+1.887	1.009	+0.134
a,		+2.7	-19.3	+3.6	-19.3	÷3·7	-19.4	+3.1	-19.4
<i>b</i> ,	0	+0.06	- 0.27	-0.10	— o.27	0.12	— o.26	-0.01	- 0.25

Tag 1940 Jan.	_	AR.	Dekl.	AR.	D 11	A TO	- 11	4.75	
Jan.	0			A.1t.	Dekl.	AR.	Dekl.	AR.	Dekl.
	_	11h 6m	+44° 48′	II <sup>h</sup> 8 <sup>m</sup>	-22° 29'	IIh Iom	+20° 50′	II <sup>h</sup> II <sup>m</sup>	+15°44′
	ı	18.545 388	68.55 46	43.478 307	51.61 253	55.988 316	56.83	6.426 308	76.69 155
	11	18.933 354	68.00	43.785 275	54.14 261	56.304 288	55.46	6.734 281	75.14 126
	21	19.287 307	68.13	44.060 236	56.75 261	56.592 251	E4.4T	7.015 244	72.88
	31	19.594 251	68.66		59.36 254	56.843 207	52.72	7-259 201	72.04
No. 1	10	19.845	69.63 97	44.488	61.90 241	57.050 159	F2 20 33	7.460	72.22
			)		1		33.39 1		=
	20	20.035 125	70.99 169	44.632 97	64.31	57.209 109	53.40	7.614 107	72.04 2
März	I	20.160 61	72.68	44.729 52	66.53 201	1057-318 61	53.73 <sub>61</sub>	7.721 60	72.06 30
	10	20.22I I	74.61	44.781 9	08.54	57.379 16	54.34 82	7.781 16	72.36 53
	20	20.222 54	70.08	44.790 29	70.30	57.395 25	55.16	7.797 23	72.89 71
	30	20.168 54	78.81 208	44.761 59	71.79 122	57·37° <sub>58</sub>	56.15 109	7.774 55	73.60 84
Apr.	9	20.067 140	80.89 196	44.702 85	73.01	57.312 86	57.24 114	7.719 82	74.44 02
	19	19.927 169	82.85	44.617 105	73.94 65	57.226	58.38 113	7.637 101	75.26
	29	19.758 188	84.00	44.512 119	74.50	57.119 120	50.5T	7.536 114	76.30
Mai	9	19.570 200	86.10 119	44.393	74.06	56.999 128	60.58	7.422	77.24 88
	19	19.370 203	87.29 85	44.266	75.05	56.871	61.55 85	7.300 124	78.12 81
		_			19		03		
	29	19.167 200	88.14 88.62	44.134 132	74.86	56.740	62.40 70	7.176 123	78.93 71
Juni	8	18.967		44.002 129	74.41 69	56.611 123	63.10 53	7.053 117	79.64 59
	18	18.777	88.74 = 26	43.873 123	73.72 93	56.488 113	63.63 36	6.936 109	80.23 46
	28	18.603 156	88.48	43.750 112	72.79 113	56.375 101	63.99 16	6.827 97	80.69 31
Juli	8	18.447	87.85 98	43.638 100	71.66	56.274 87	64.15 4	6.730 83	81.00 16
	18	18.315 105	86.87	43.538 83	70.36	56.187 69	64.11 23	6.647 66	81.16
:	28	18.210 76	85.50 162	43.455 63	1 08.93	56.118 49	63.88	6.581 48	81.15 19
Aug.	7	18.134	83.94	43.392 39	07.4I	56.069 26	63.44 65	6.533 25	80.06
	17	18.092	82.04 214	43.353	05.00 172	56.043	62.79 96	6.508	80.59 56
	27	$18.085 \frac{7}{33}$	79.90 236	43.342 =	64.34 143	56.043 28	61.93 107	6.507 28	80.03 77
Sept.	6	18.118	77.54 255	43.363	62.91	56.071 61	60.86	6.535 50	79.26
	16	18.192 74	74.99 267	12.120	61.65	56.132	59.58 149	6.504	78.27 119
:	26	18.311 ,66	72.32 277	43.515 136	60.61	56.228 133	58.09 168	6.688	77.08 141
Okt.	6	18.477	69.55 280	43.651	59.86	56.361 172	56.41 186	6.818 130	75.67 162
:	16	18.691 261	66.75 279	43.828 219	59.46 1	56.533 210	54.55 201	6.986 206	74.05 180
	26	78 070	63.96 269	44.047 257	59.45	56.743 248	52.54 212	7.102	72.25 194
Nov.	5	19.258 346	61.27	44.304 289	FO 85 40	56.991 281	50.42 218	7.192 <sub>243</sub> 7.435 <sub>275</sub>	70.31 205
	15	19.604 380	58.73 231	44.593 315	60.68	57.272 309	48.24 219	7.710 303	68.26 211
	25	19.984 405	56.42 202	4.4.00X	61.92 162		46.05 212	8.013 303	66.15 210
Dez.	- 5 5	20.389 418	54.40	45.241 <sub>340</sub>	63.54 196	57.911 340	43.93 199	8.335 332	64.05 203
						31-	199	9 66=	
	15	20.807 418	52.76	45.581 335	65.50 224	58.251 339	41.94 181	8.667 332	62.02 189
	25 25	21.225 404 21.029	51.55 50.80	45.916 320 46.236	67.74 <sub>243</sub>	58.590 329 58.919	40.13 38.59	8.999 320 9.319	60.13 <sub>169</sub> 58.44
	35				1 /	30.919			
Mittl.		17.854	88.00	42.226	52.54	55.179	69.88	5.580	88.16
sec δ, t			+0.994	1.082	-0.414	1.070	+0.381	1.039	+0.282
a, a' b, b'			-19.5 - 0.23	+3.0 +0.03	-19.5 0.22	+3.2 $-0.02$	-19.6 - 0.21	+3.2 -0.02	-19.6 - 0.21

Tag	425) v U	rsae maj.	426) δ C	rateris	427) σ	Leonis	428) π C	entauri
rag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1940	11h 15m	+33°24'	11 <sup>h</sup> 16 <sup>m</sup>	-14°27'	11 <sup>h</sup> 18 <sup>m</sup>	+6° 21′	11 <sup>h</sup> 18 <sup>m</sup>	-54° 9′
Jan. 1	15.223 347	62.48	21.404 303	14.24 236	3.432 303	22.18 185	17.805 425	32.81 266
11	15.570 317	61.52	21.707 303	16.60 236	3.735 276	20.33 166	18.230 380	75 47
21	15.887 277	61.00	21.981 238	18.96 236	4.011	18.67		-0 .0 301
31	16.164 231	60.01	22.219 196	21.25 217	4.252 200	17.26	18.934 <sub>261</sub>	11 71
Febr. 10		61.24 33	22.415	23.42	4.452 156	16 70	19.195	45.17 343
1001. 10	1	/2				05		45.17 343
20		61.96	22.565 105	25.41 178	4.608	15.27 56	19.390 128	48.68 349
März 1		03.02	22.670 61	27.19	4.718 65	14.71 29	19.518 63	52.1/ 240
II	17	1 04.35 TES	22.731 19	28.74	4.783 23	14.42	19.581	55.5/ 324
20	' 20	05.88 164	22.750 17	30.04	4.806	14.38 18	19.581 56	58.81
30	1 - 00	67.52 169	22.733 48	31.08 79	4.792 45	14.56 36	19.525 105	61.81 272
Apr. 9	16.685 101	69.21 165	22.685 73	31.87	4.747 70	14.92	19.420	64.53 238
19	1 16.584	70.80	22.612	32.41 31	4.677	15.41 60	19.271	00.91
29	16.458	72.41	22.520 106	32.72 8	4.587	16.01 67	19.087	68.92 160
Mai 9	10.315	73.80 118	22.414	32.80	4.483 112	16.68	18.874	70.52 115
19	16.162 153	74.98 94	22.299 120	32.66	4.371 115	17.38 72	18.638 251	71.67 69
29		77.00	22.179 121	22.22	4.256 115	т8 то	18.387 260	72.36 23
Juni 8	15.849 149	76.60	22.058 119	21.70	4.141	TR RT 71	18.127 262	$72.59 \frac{23}{25}$
18	15.700 139	76.00	21.939 112	27.00	4.029 105	TO 40	17.865	72.34 71
28	15.561 125	77.00	21.827	30.23	2.024	20.12	17.608 246	7T ()2
Juli 8	15.436 108	76.80	21.722	29.24 109	3.829 84	20.60 57	17.362 228	70.48
18		49	73		04	49		*3/
28	87	76.40 76	21.630 78	28.15	3.745 69	21.18 39	17.134 201	68.91
	1 5 65	75.64 104	21.552 60	26.98 119	3.676	21.57 28	16.933 168	66.98 224
Aug. 7	1 . 39	74.60	21.492 38	25.79 118	3.624 31	21.85 13	16.765 126	64.74 247
17	0. 10	73.30	21.454 13	24.61	3.593 8	21.98	16.639 78	62.27 263
27	15.127 23	71.75 178	21.441 16	23.50 100	3.585 =	21.95 21	16.561 22	59.64 269
Sept. 6	1 0 0 58	69.97 198	21.457 49	22.50 82	3.605 51	21.74 42	16.539 39	56.95 265
16	15.208	67.99 216	21.506 86	21.68	3.656 84	21.32 65	16.578	54.30 250
26	15.304	65.83	21.592	21.09 32	3.740	20.67	10.082	51.80 236
Okt. 6	15.442	63.52	21.716	20.77	3.860	19.78	16.854	49.54 TOT
16	15.622	61.09 249	21.880	20.77 35	4.019 197	18.65	17.093 303	47.63 148
26	15.844 263	58.60	22.084	21.12	4.216 233	17.27 160	17.396	46.15 97
Nov. 5	TO TO 7	50.10	22.320	21.83	1 4.440	15.67	17.757	45.18 40
15	10.400	53.64 234	22.601 302	22.91	4.715 294	13.87	18.167 446	44.78
25	16.740 355	51.30 215	22.903 302	24.33	5.009 313	11.92 204	10.013	44.97 78
Dez.	17.095 355	49.15 189	23.223 329	26.06	5.322 324	9.88 209	19.082 477	45.75 136
15		47.26		28.05 218			10.550	47.11 191
25	17.833 370	45.69 157	23.552	20.22	5.646 5.970	7.79 204	19.559 469	49.02 238
35	18.193	44.49	23.879 315	30.23 <sub>231</sub> 32.54	6.284	5.75 <sub>194</sub> 3.81	20.472 444	51.40
				1				
Mittl. Or		79.03	20.301	12.92	2.551	30.42	15.794	42.91
$\sec \delta$ , $tg$	1 -	+0.660	1.033	-0.258	1.006	+0.111	1.708	-1.385
a, a'	+3.2	-19.7	+3.0	-19.7	+3.1	-19.7	+2.7	-19.7
b, b'	-0.04	— o.19	+0.02	- o.19	10.01	- 0.18	1-0.09	- 0.18

Та	g	429) Grb 1	771 UMaj	433) λ D	raconis	434) <b>ξ</b> ]	Hydrae	436) λ C	entauri
10	6	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
194	40	11 <sub>p</sub> 10 <sub>m</sub>	+64° 38′	11 <sup>h</sup> 27 <sup>m</sup>	+69° 39′	11 <sup>b</sup> 30 <sup>m</sup>	-31°31'	II <sup>h</sup> 33 <sup>m</sup>	-62°41'
Jan.	I	18.77 60	69.99	52.01 71	21.63	4.038 335	26.48 252	2.54 53	2.68
	11	19.37 54	70 TO 11	$52.72_{66}^{71}$	21.78 76	4.373 304	29.00 271	3.07 49	5.12 285
	21	19.91 48	70.79 69	53-38 59	22.54 134	4.677 266	31.71 280	3.56 49	7-07
	31	20.39 40	72.04 176	53.97 49	23.88 186	4.943 221	34.51 282	3.07	7.97 <sub>320</sub> 11.17 <sub>344</sub>
Febr.	10	20.79 31	73.80 218	54.46 38	25.74 230	5.164 173	37.33 277	$3.97_{34}^{41}$ $4.31_{26}^{26}$	14.61 344
2 0 0 - 1		1			1				358
	20	21.10	75.98 250	54.84 26	28.04 263	5.337 124	40.10 264	4.57 18	18.19 365
März	I	21.30	78.48	55.10 14	30.07 286	5.461 76	42.74 248	4.75	121.04
	II	21.40	01.21 282	55.24 I	33.53 296	5.537 32	45.22	4.85	1 23.40
	20	21.40	184.03	55.25 10	30.49 201	5.569 10	47.48	4.87	20.91 222
	30	21.31 18	86.83 268	55.15 21	39.43 280	5.559 44	49.50 174	4.82	32.30 308
Apr.	9	21.13	89.51	54·94 <sub>30</sub>	42.23 257	5.515 74	51.24 145	4.71 18	35.38 278
1	19	20.88	91.96 214	54.64	44.80 257	I 5.44T	52.69 113	4.53 22	38.16
	29	20.57	94.10	54.64 <sub>38</sub> 54.26 <sub>44</sub>	47.04 183	5.342 117	53.82 82	4.31 27	40.57
Mai	9	40.44 0	95.85 131	53.82 48	48.87 138	5.225	54.64	4.04 30	42.58
	19	19.84 38	97.16 83	53·34 <sub>50</sub>	50.25 87	5.094 141	55.13 16	$3.74_{33}^{30}$	44.15
	20		07.00						
Juni	29 8	19.45 40	$97.99$ $98.33$ $\frac{34}{17}$	52.84 <sub>51</sub>	51.12 36 51.48 17	4.953 146	55.29 16	3.41 3.06 35	45.24 6
Juni	18	19.05 38	98.16	52.33 50		4.807 148	55.13 48	3.00 35	45.84
	28	18.67 36	- 00	51.83 48	51.31 69	4.659 145	54.65 79	2.71 35	45.94 4
Juli	8	18.31 33	97.50	51.35 44	50.62 119	4.514 139	53.86	4.55	45.52 9
Jun	0	17.90 29	96.37 158	50.91 39	49.43 165	4.375 129	52.79 133	2.00 33	44.61
	18	17.69 25	94.79 199	50.52 50.18 34 50.18 28	47.78 209	4.246	51.46 153	1.67 29	43.24 18
	28	17.44	92.80	50.18 28	45.69 247	4.132 95	49.93	1.30 26	41.43 21
Aug.	7	17.25	90.44 268	49.90 27	43.22 280	4.037 71	48.23	1.12	39.25
	17	17.11	87.76	49.69 12	40.42 308	3.966	46.42 ,86	0.91	36.77 27
	27	17.04	84.81 316	49.56 4	37.34 330	3.924 7	44.56 183	0.77 8	34.06 28
Sept.	6	17.03 6	81.65 331	49.52	34.04	3.917	42.73 171	0.69	31.22 28
	16	17.09	78.34 340	49.55	30.58 354	3.948 31	41.02	0.70	28.35 27
	26	17.23 21	74.94 342	49.68 23	27.04 355	4.022	39.48 127	0.79 18	25.56 26
Okt.	6	17.44 28	1 / 1 - 5 - 4	49.91 32	23.49 349		1 28.2T	0.97 26	22.96 23
	16	17.72 37	$68.15 \frac{337}{324}$	50.23 40	20.00 334	4.142 167	27.27	1.23 35	20.66
	26	18 00	64.07		76.66	4 500	33	7 -0	
Nov.		18.09 44	64.91	50.63 <sub>50</sub>	16.66 312	4.522 257	36.72 12 36.60 25	1.58 42	18.77
1101.	5	10.53	01.09 274	51.13 58	13.54 281	4.779 206	30.00 35	2.00	17.36 8
	15	19.03	59.15 226	51-71 65	10.73 242	5.075 328	36.95 82	4.49	16.50 2
Dez.	25 5	19.58 60 20.18 62	56.79 192	52.36 7° 53.06 74	8.31 196	5.403 349	37.77 127	3.03 77	16.25
2021	J		54.87 142		6.35		39.04 170	3.60 58	9
	15	20.80 63	53.45 85	53.80	4.93 84	6.111 359	40.74 206	4.18 <sub>58</sub> 4.76 <sub>55</sub>	17.60
	25	21.43 62	52.60 26	54.55 74	4.09	1 0.4/0 246	42.80	4.76 55	19.18
	35	22.05	52.34	55.29	3.86	6.816	45.17	5.31	21.30
Mitt	l. Ort	18.40	92.73	51.89	44.81	2.757	31.25	0.17	15.34
	s, tg δ	2.337	+2.112	2.877	+2.698	1.173	-0.613	2.179	-1.936
	a'	+3.6	-19.7	+3.6	-19.8	+3.0	-19.9	+2.8	-19.9
	b'	-0.14	- 0.18	-0.18	- 0.14	+0.04	- 0.13	+0.13	- 0.12

Т	a.g	437) v	Leonis	440) 3 E	raconis	441) χ U	rsae maj.	444) β	Leonis 1)
	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	11h 33m	-0° 29'	11 <sup>h</sup> 39 <sup>m</sup>	+67° 3′	II <sup>h</sup> 42 <sup>m</sup>	+48° 6′	11 <sup>h</sup> 46 <sup>m</sup>	+14°53′
Jan.	I	53.389 307	37.73 205	8.56 66	74.76 8	53.650 421	24.24	0.648 318 0.966 297	76.81
	II	53.090	39.78	9.22	74.68	E4 07T	23.52 72	0.966	75.10
	21	53.978	41.70	9.83	75.22 54	E4 466 393	$23.35 \frac{1}{36}$	1.263 266	
	31	54.228 211	43.43	10.37	76.35 167	54.82T 333	23.71 87	1.529	70 76
Febr.	10	54.439 168	44.94 126	10.84 47	78.02 213	55.124 244	24.58	1.756 184	71.80 76
	20	54.607 124	46.20 98	11.21	80.15	55.368 181	25.91	1.940	71.38 8
März	1	54.731 e.	47.18 98	11.48	82.66 276	55.549 114	27.04		71.30 22
	II	54.812	17.00	11.03	85.42 290	1855.663 50	29.67 224	2.172	71.52
	20	54.851 39	48.36 46	11.67 -	88.32 292	$55.713 \frac{30}{10}$	31.91 236	2.223	72.01
	30	54.854 3	48.58 2	11.61 16	91.24 283	55.703 64	34.27 236	$2.234 \frac{11}{24}$	72.71 86
Apr.	9	54.825 56	48.60	11.45	94.07 263	55.639 111	36.63	2.210	73.57
	19	54.769 76	48.43	11.21	96.70 233	55.528	38.90	2.158 76	74.54 97
	29	54.693	48.12	10.00	99.03 706	55.380 179	41.0I -06	2.082	75.57 103
Mai	9	54.602	47.68	10.55	100.99	55.201 199	42.87	1.988 94	76.60
	19	54.500 109	47.14 <sub>61</sub>	10.12	102.52	55.002 211	44.42	1.881	77.60 93
	29	54.391	46.53 67	9.69	103.57	54.791 217	45.62 82	1.767 119	78.53 83
Juni	8	54.280	45.86	9.25	104.12	54.574 216	46.44	1.648	79.36 72
	18	54.169 107	45.16 72	0.01	104.15	54-358 208	46.85	1.529 116	80.08 58
	28	54.062	44.44 71	0.39	103.05 0	54.150 196	46.85	1.413	80.66
Juli	8	53.962 92	43.73 69	7.99 36	102.67 146	53.954 179	46.43 81	1.303 101	81.08 25
	18	53.870 79	43.04 65	7.63 32	101.21	53.775 156	45.62	1.202 90	81.33 8
	28	53.791 65	42.39 57	7.31 26	99.31	53.619	44.42	1.112 74	81.41
Aug.	7	53.726	41.82 48	7.05	97.01	53.489	42.85	1.038	81.31 30
	17	53.681 23	41.34 34	6.85	94.30	53.389 64	40.96	0.981 34	81.01
	27	53.658	41.00 18	6.71 7	91.41 320	53.325 26	38.76 247	0.947 8	80.50 73
Sept.	6	53.661	40.82	6.64	88.21	53.299 18	36.29 269	0.939	79.77
	16	53.695 68	40.83	6.65	04.03 1	53.317 65	33.60 287	0.961	78.82
	26	53.763 105	41.07 49	6.74	01.54	53.382 116	30.73	1.018	7.7.64
Okt.	6	53.868	41.56 76	0.91 26	11.00 201	53.498 169	27.73	1.112	75.24 162
	16	54.012 184	42.32	7.17 34	74.29 340	53.667 222	24.00 308	1.245	74.62 182
	26	54.196	43.35 131	7.51 43	70.89	53.889 276	21.58 301	1.419 215	72.80 199
Nov.	5	54.418 257	44.60	7.94	70.89 321 67.68 293	54.105	10.01 288	T.034	70.81
	15	54.075 286	46.22	0.44	04.75 25	54.490 <sub>368</sub>	15.69 265	1.000 _0.	68.69
	25	54.961 208	48.01	9.01 62	02.10 214	54.050	13.04	2.1/0 200	1 00.49
Dez.	5	55.269 322	49.96 207	9.64 66	60.04 162	55.260 426	10.69 198	2.479 <sub>326</sub>	64.28 217
	15	55.591 324	52.03 211	10.30 68	58.42 106	55.686	8.71	2.805 331	62.11 204
	25	55.915 316	54.14 200	10.98 67	57.36 45	56.122 433	7.18	3.136	60.07
	35	56.231	56.23	11.65	56.91	56.555	6.14	3.463	58.22
Mittl.	Ort	52.535	32.37	8.58	97.51	53.340	43.79	0.006	87.01
sec δ,	$\operatorname{tg}\delta$		-0.009		+2.365		+1.115	1.035	+o.266
a, a		+3.1	-19.9		-20.0	-	-	+3.1	-20.0
b, 7		0.00	- o.rı	,	— o.og		- 0.07		- 0.06

<sup>1)</sup> Die jährliche Parallaxe (o"101) ist bereits berücksichtigt.

Ta	a.g	445) β V	'irginis¹)	447) Y Ur	sae maj.	450) o 1	irginis	452) δ C	entauri
	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
194	40	II <sup>h</sup> 47 <sup>m</sup>	+2° 5′	11 <sup>h</sup> 50 <sup>m</sup>	+54° 1'	12 <sup>h</sup> 2 <sup>m</sup>	+9° 3′	12h 5m	-50° 23'
Jan.	I	34.889 313	64.68 201	41.127 469	21.63	9.740 319	50.77 189	15.849 435	5.96 220
	II	35.202 313	02.07	1 4T COO	21.01	10.059 299	48.88 167	1 10.284	8.16 257
	21	35·493 <sub>260</sub>	60.81	42.039 443	20.97	10.358 299	47.21	10.089	10.73 287
	31	35.753 223	59.16	42.439 345	21.40	10.030	1 4 E X E	17.052	I 3.00
Febr.	10	35.976 182	57.76	42.784 281	22.55	10.866	44.72 78	17.366 314	$16.67 \frac{307}{320}$
	20	36.158 138	76.62	43.065 211	24.10	11.062	43.94	17.625 200	19.87 324
März	I	1 30,200	FF 70	43.276	26.05 227	11.215 110	12 10 45	17.825	23.11 320
	II	36.391 95	EE 22 3/	43.413 64	28.32 248	TT 20F	12 24	17.967 86	
	20*)	1926 115 34	54.02	20 42 477	30.80 258	TT 202	12 17	T8 052	29.42 294
	30	26 46T	E1.8E -	10 157	33.38 258	TT.422	1282 30	17 TR 08E	32.36 273
		10	14	00	_	7	30	1/	
Apr.	9	36.445 43	54.99 <sub>31</sub>	43.403 123	35.96	11.419 33	44·39 <sub>70</sub>	18.068 61	35.09 245
	19	36.402 65	55.30 45	43.280 170	38.43 228	11.386 58	45.09 80	18.007 99	37.54 215
36 .	. 29	36.337 83	55·75 <sub>55</sub>	43.110 205	40.71 200	11.328 77	45.89 86	17.908 134	39.69 181
Mai	9	36.254 95	56.30 62	42.905 232	42.71 166	11.251 91	46.75 89	17.774 162	41.50 143
	19	36.159 103	56.92 68	42.673 250	44.37 127	11.160	47.64 87	17.612 186	42.93 102
	29	36.056	57.60	42.423 258	45.64 85	11.058 109	48.51 83	17.426 205	43.95 6r
Juni	8	35.949	58.30	42.165	40.49	10.949	49.34 76	17.221 218	44.56
	18	35.840	59.00 69	41.906	46.90	10.837	50.10 68	17.003	44.73 26
	28	35.733 103	59.69 66	41.653	46.85	10.725	50.78 58	16.778	44.47 60
Juli	8	35.630 95	60.35 60	41.414 221	46.35 94	10.615 105	51.36 46	16.551 222	43.78 109
	18	35·535 85	60.95	41.193 196	45.41	10 510	51.82	16.329 209	42.69 147
	28	25.450	61.48	40.997 167.	44.06	10.414 84	52.14	16.120 189	41.22 180
Aug.	7	35.370	61.02 45	40.830	42.31 210	10.330 68	52.31	15.931 161	39.42 208
	17	35,325 JT	62.25 18	40.007	40.21	10.262 48	52.22	15.770 125	37.34 228
	27	35.292 7	62.43 <sub>1</sub>	40.604 48	37.79 270	10.214 24	52.15 37	15.645 80	35.06 241
Sept.	6	35.285	62.44	10 556	35.09 292	TO.TOO -	5T.78	T = = 6 =	32.65 246
-	16	35.308	62.25	10.557	32.17	10.105	5T TO 39	TC C28	30.19 239
	26	35.365	61.84	40 611	29.06 322	TO 224 39	50.37 106	TE 560	27.80 239
Okt.	6	25.458 93	61.18	40 722	45.04	TO 210	49.31 129	TE 662 94	25.57 198
	16	35.591 174	60.27 118	40.893 232	22.56 326	10.426	48.02 153	15.822 225	23.59 164
	26				TO 20	-3/		3	
Nov.		35.765 213	59.09 143	41.125 291	19.30	10.583	46.49 175	16.047 288	21.95
1101.	5 15	35.978 <sub>250</sub>	57.66 167	41.416 348	16.13 300	10.782 238	44.74 193	16.335 344	20.74 72 20.02 18
	25	36.228 <sub>281</sub>	55.99 <sub>186</sub>	41.764 397	13.13 274	11.020 272	42.81 206	16.679 390	10.84
Dez.	-5 -5	36.509 306	54.13 201	42.101 428	7.00	11.292 299	40.75 215	17.069 425	19.84 37
2004	S	36.815 321	52.12	42.599 467	7.99 198	11.591 318	38.60 217	17.494 447	92
	15	37.136 326	50.02	43.066 <sub>481</sub>	6.01	11.909 327	36.43	17.941 453	21.13
	25	37.462	47.91 207	43·547 <sub>480</sub>	4.50 96	12.230 324	34.31	18.394	22.57 193
	35	37.783	45.84	44.027	3.54	12.560	32.32	18.839	24.50
Mittl	Ort	34.134	70.47	40.993	42.18	9.147	58.40	14.357	17.71
sec δ		1.001	-+0.037		+1.378	1.013	+0.160	1.568	-1.208
a,		÷3.I	-20.0	+3.1	-20.0	+3.I	-20.0	+3.1	-20.0
	b'			U				0	

 <sup>1)</sup> Die jährliche Parallaxe (o"xor) ist bereits berücksichtigt.
 \*) Bei Stern 450) und 452) lies März 21.

Ta	ag	453) ε	Corvi	454) Br 16	34 Caml	456) 8 U	rsae maj.	459) β C	hamael.
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	12h 7m	-22°17'	12 <sup>h</sup> 9 <sup>m</sup>	+77° 56′	12h 12m	+57° 21'	12 <sup>h</sup> 14 <sup>m</sup>	-78° 58
Jan.	I	2.984 333	6.43 227	23.08	35.38 17	27.668 5°7	36.47 78	51.29 124	27.77 163
	II	3.317 333	8.70	24.23	A C OT	28.175 485	35.69 18	52.53	29.40 217
	21	3.629 282	11.07 241	25.34 <sub>101</sub>	35.21 48	28.660 448	25 51 -	F2 6X	21 77
	31	A OTT	13.48 238	26.25	36.80	20. 708 ***	35.93 100	54.72	24.00
Febr.	10	3.911 <sub>245</sub> 4.156 <sub>205</sub>	15.86 238	27.25 75	38.49 220	29.503 395	36.93	55.62	37.28 336
	20	4.361 161	18.14 215	28.00	40.69 262	29.834 259	38.44 197	56.37	40.65 359
März	I	1 7 522	20.29	28.57 57	43.31 292	30.093 182	40.41 233	56.04	41.24 374
	11	4.630		28.04 3/	46.23 310	30.275 103	42.74 258	57.25	47.98 378
	21	4.714	24.02	20.12	49.33 315	30.378 28	45.32 272	57.58	FT 76
	30	1 752	25.55 129	25 20.TO	52.48 309	20.406	48.04 274	1 57 62 -	EE 50 3/7
A				- 44		43			3
Apr.	9	4.755 28	26.84	28.88 39	55.57 290	30.363 107	50.78 267	57.52	59.12 343
	19	4.727 53	27.88 79	28.49 54	58.47 261	30.256	53.45 250	57.25	62.55 317
Mai	29	4.674 74	28.67 55	27.95 67	61.08 223	30.095 207	55.95 222	56.83 56	1 05.12
141501	9	4.600 91	29.22 30	27.28 77	63.31 178	29.888	58.17 189	56.27 68	68.56 245
	19	4.509 105	29.52 6	26.51 85	65.09 129	29.646 268	60.06	55·59 <sub>78</sub>	71.01 201
	29	4.404 115	29.58	25.66 89	66.38	29.378 284	61.56 107	54.81 <sub>87</sub>	73.02 152
Juni	8	4.289 1122	29.41	24.77 gi	67.14 20	29.094	62.63 60	53.94 93	74.54 100
	18	4.167	29.00 62	23.86 91	67.34 36	28,802	63.23	53.01 97	75.54 45
	28	4.042	28.38 82	22.95 88	66.98	28.510	$63.36 {35}$	52.04 98	75.99
Juli	8	3.916	27.56 99	22.07 83	66.09 142	28.227 268	63.01 81	51.06 97	75.90 65
	18	3.794 115	26.57	21.24 76	64.67	27.959 246	62.20	50.09 92	75.25 119
	28	3.679 104	25.43 126	20.48 67	62.77	27.713 219	60.93 170	49.17 85	74.06 169
Aug.	7	3.575 87	24.17	то.8т ′	60.43 274	27.494 184	59.23 208	18.32	72-37 213
	17	3.488 64	22.85	19.24 45	57.09 208	27.310	57.15 243	47.58 60	70.24 251
	27	3.424 38	21.51 130	18.79 32	54.61 335	27.166 98	54.72 275	46.98	67.73 281
Sept.	6	3,386	20.21 121	18.47 18	51.26 356	27.068 47	51.97	46.54 26	64.92 301
	16	3.382	TO 00	18.29 3		27.021 4/	48.96 321	46.28	
	26	2 416 34	17.95 82	1 r8.26	44.00 376	27.032		46.23 16	58.80
Okt.	6	3.492 76	17.12	18.38 28	40.24 374	27.105 73	12 10 333	46.30	55.73 293
	16	3.612 167	16.59 54	18.66	36.50 3/4	27.243 206	38.97 343	46.76 37	52.80 266
	26	3.779 212	16.28	10.10	32.87	27.440	35.53 336	45.05	50.14 228
Nov.	5	3.991 253	16 52	10.71	29.42 316 26.26 279		20 TH	48.13	47.86 181
	15	4.244 289	17 07 ST	20.46	26.26 316	28.060 338 28.456 396	28.98 294	49.08 95	46.05 127
	25	4.533 318	17.99 130	21.34 100	23.47 234		26.04 261	50.17 120	
Dez.	5	4.851 336	19.29 163	22.34 109	21.13 181	28.902 446	23.43 219	51.37 126	44.12 2
	15	5.187 342	20.92		19.32	20.285	21.24 169	52.63 128	11.70
	25	5.529 340	22.84 216	23.43 115 24.58 117		20.802	19.55	53.91 125	44.73 125
	35	5.869 340	25.00	25.75	17.53	30.405	18.41	55.16	45.98
Mitt	l. Ort	2.067					55.01		
	$\delta$ , tg $\delta$	2.067 1.081	9.95 0.410	24.67	58.32 -+4.684	1.854	57.01 +1.562	47.05	44.88 -5.135
	a'	+3.I	-20.0	+2.8			+1.562 -20.0	5.231	-5.135 -20.0
	b'	+0.03	+ 0.03	-0.3I	-20.0 -+ 0.04	+3.0 -0.10	+ 0.05	+3.5 +0.34	+ o.o6

T	a.g	460) n	Virginis	462) α (	Crucis m	466) 20	Comae	465) <b>δ</b>	Corvi
	6	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	12 <sup>h</sup> 16 <sup>m</sup>	-o° 20'	12 <sup>h</sup> 23 <sup>m</sup>	-62° 45′	12 <sup>h</sup> 26 <sup>m</sup>	+21° 13′	12 <sup>h</sup> 26 <sup>m</sup>	-16° 10
Jan.	I	50.669 320	4-33 206	16.83 59	45.69 182	42.739 337	30.62	46.063 330	51.45 215
	II	50.989 302	6.39	17.42 54	47.51 230		28.86	46.393 313	53.60 221
	21	51.291 276	8.33		49.81 271	12 208	27.44	46.706 288	1 == O-
	31	51.567 243	10.09	TR 46	52.52 303	1 42 606	26.40		55.01 220
Febr.	10	51.810 205	11.62	18.90 44	55.55	12.061	25 77	47.249 217	60.13 198
1001.	10				55.55 326		25.11 22		
	20	52.015 165	12.89	19.27	58.81	44.188 184	25.55	47.466	62.11 182
März	1	52.180	13.89	19.56	348	44.372 140	25.72	47.643 136	03.93 ,60
	II	52.303 84	14.61 45	19.78 14	1 05.70	44.512 96	26.24 84	47.779 <sub>96</sub>	65.55
	21	52.387 46	15.00	28 19.92 7	69.17	44.608	27.08 108	2947.875 58	00.95
	30	2052.433 13	15.26	19.99	72.54 323	44.662 16	28.16	47.933 24	68.12
Apr.	9	52.446	15.25 20	20.00	75.77 301	44.678	29.43 138	47.957 6	69.06
	19	52.429	15.05 36	19.93	10.10	44.661 46	30.81 138	47.051	69.77
	29	52.388 61	14.69 48	19.81	81.50 240	44 6TE 40	32.25	47.010	70 27
Mai	9	52.327 78	14.21	19.63	83.90 203	44.545 89	33.67	47.865	70.56
	19	52.249 90	13.64 57	19.41 27	85.93 160	44.456	35.02 135	47.792 88	70.65
	29	52.159 100	T2 00	19.14 30	87.53 116	44.352	36.27 109	47.704 100	70.56
Juni	8	52.059 100	T2 2T	1 18.84		44.238	27.20	47.604 110	70.20
	18	51.953 109	11.61 /	1 18.52	80.27	44.115 126	28 28	47.494 116	60.85
	28	51.844	10.90	18.17 35	80.56	43.989 126	28 00 /1	47.378 119	60.26
Juli	8	51.734 107	10.20 66	17.82 35	80.25	43.863	20.47	47.259 119	68 50 73
	-0				/9		-3		1
	18	51.627 102	9.54 61	17.47 34	88.46	43.739 118	39·72 I	47.140 116	67.68
A	28	51.525 92	8.93	17.13 34	87.20 168	43.621 108	39.73	47.024 107	66.74
Aug.	7	51.433 79	8.40	16.81 28	85.52 206	43.513 94	39.49 50	46.917 94	65.74 103
	17	51.354 60	7.97 30	16.53 22	83.46	43.419 75	38.99 76	46.823 76	64.71 101
	27	51.294 37	7.67	16.31 17	01.09 260	43.344 52	38.23 102	46.747 52	63.70 96
Sept.	6	51.257 9	7.52 3	16.14	78.49 275	43.292 22	37.21 127	46.695 21	62.74 85
	16	51.248 =	7.55 25	16.05	175.740	43.270	35.94 152	46.674 14	61.89 68
	26	51.272 62	7.80 49	16.03 -8	72.96	43.281 50	34.42	46.688	61.21 48
Okt.	6	51.334	8.29 75	16.11	70.20	43.331 91	32.66	46.741 97	60.73
	16	51.437 145	9.04 101	16.28 17	67.73 223	43.422	30.69 217	46.838	60.52
	26	51.582 187	10.05 128	16.54	65.50 185	43.558 180	28.52 233	46.981 188	60.61
Nov.	5	51.769 228	II.33	16.89 43	63.65	43.738 180	26.19 242	47.169 231	61.02
	15	51.997 263	12.86	17.32 49	62.27 84	43.962 263	23.77 248	47.400 268	61.77
	25	52.260 292	14.61 193			44.225 296	21.29 246	1 47 66X	62.86
Dez.	5	52.552 292	16.54 205	18.36 55	66	44.521 321	18.83 236	47.068	64.26
				1	34		1		
	15	52.865 324	18.59 211	18.94 60	61.50	44.842 335	16.47 219	48.289 333	65.95 192
	25	53.189 323	20.70 210	19.54 58	62.43	45.1/1 340	14.28	48.022	67.87 208
	35	53.512	22.80	20.12	63.92	45.517	12.34	48.955	69.95
Mitt	l. Ort	50.067	0.57	15.00	60.94	42.433	41.41	45.342	53.70
sec 8	tg δ	1.000	-0.006	2.185	-r.943	1.073	o.388	1.041	-0.290
	a'	+3.1	-20.0	+3.3	-19.9	+3.0	-19.9	+3.1	-19.9
Ъ,		0.00	+ 0.07	+0.13	+ 0.10	-0.03	+ 0.12	+0.02	+ 0.12
								G 4	

т.	ag	470) β Can	num ven.1)	472) x I	Praconis	471) β	Corvi	473) 24 0	comae sq
	~ზ	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	12h 30m	+41°40′	12 <sup>h</sup> 30 <sup>m</sup>	+70° 6′	12 h 31 m	-23° 3′	12h 32m	+18°41'
Jan.	1	53.785 393	43.24 136	54.79 74	45.83 67	14.612 341	49.70 213	7.519 333	75.91 183
	11	54.178 379	41.88 84	55.53 73	45.16 45.16	14.953 325	51.83 226	1.052	74.08
	21	54.557 379	41.04 30	56.26 68	45.13 62	15.278 299	54.09 232	8.172 297	72 56 137
	31	54.909 316	40.74	56.94 <sub>61</sub>	45.75	15.577 266	56.41 231	8.469 265	7T 4T ***
Febr.	10	55.225 270	40.97 74	57·55 <sub>53</sub>	46.98 179	15.843 227	58.72 225	8.734 228	70.65 76
									3-
März	20	55.495 219	41.71	58.08 42	48.77 227	16.070 187	60.97	8.962 187	70.29 2
Marz	I	55.714 164	42.92 160	58.50 30	51.04 264	16.257 145	63.09 197	9.149	70.31
	II	55.878 109	44.52 192	58.80 19	53.68 291	16.402 103	65.06 178	9.293 100	70.68 69
	21	55.987 55	46.44 214	39 58.99 6	56.59 304	16.505 65	66.84	30 9.393 60	71.37 94
	30	56.042 5	48.58 227	59.05 5	39.03 306	16.570 30	68.41 134	9.453 23	72.31
Apr.	9	56.047	50.85 230	59.00 16	62.69 297	16.600	69.75	9.476	73.45 127
	19	56.007	53.15 224	58.84	05.00	16.599 30	70.86 88	9.466	74.72
	29	55.928	55.39 210	58.58	08.42	16.569 52	71.74 64	9.427 62	76.06
Mai	9	55.817	57.49 180	50.24	70.88 208	10.510 73	72.38	9.365 82	77.40
	19	55.679 158	59.38 161	57.83 46	72.96 164	16.443 91	72.79 17	9.283 97	78.71 121
	29					1	72.96	, ,	1
Juni	8	55·5 <sup>21</sup> 173 55·348 182	60.99 130	57·37 50	74.60 116 75.76 62	16.352 <sub>104</sub> 16.248 <sub>115</sub>	72.OT	9.186	79.92 <sub>109</sub> 81.01
0 1111	18	55.166	63.23	56.87 52		16.240 115	72.63	9.077	8r 04 93
	28	54.070 187	63.80 57	56.35 53	76.39 10 76.49 42	16.133 124	72.14 60	8.960	82.68
Juli	8	54.979 <sub>185</sub> 54.794 <sub>180</sub>		55.82 52	76.07	16.009 129	77 45	8.837	82 22 33
o um			63.97 =	55.30 <sub>50</sub>	93	15.880 129	71.45 87	8.713 122	03.23 33
	18	54.614 171	63.76 61	54.80 47	75.12	15.751 126	70.58 103	8.591 118	83.56 10
	28	54.4436	63.15	54.33	73.07	15.625 118	1 69.55	8.473	83.66
Aug.	7	54.287	62.16	53.90 28	71.70	15.507 105	68.39	8.364 95	83.53 37
	17	54.150	60.81	53.52 21	09.41	15.402 85	07.15	8.269	83.16 62
	27	54.039 82	59.11 202	53.21 24	66.69 305	15.317 61	65.87 128	8.191 55	82.54 87
Sept.	6	53.957 46	57.09 231	52.97 16	63.64	15.256 20	64.59 120	8.136 28	81.67 112
•	16	52.OIT		52.81 7	60.32 352	TE.227	63.39 107	8.108 6	80.55
	26	52 006 -	FO 00 230	52.74 2	56.80 352 366	T5.226	62.32 88	STTA	79.18 137
Okt.	6	52.046	49.45 294	52.76	53.14 372	TE 286	6T 44	8 T = 8 TT	77.57 184
	16	54.036	46.51 304	52.89 23	49.42 370	TE 282	60 8r	8.243	75.73 205
	,	^+3	304				33		
3.7	26	54.179 196	43.47 309	53.12	45.72 358	15.526	60.48	8.373 174	73.68 222
Nov.	5	54.375 247	40.30 205	55.45	42.14 00-	15.718	60.49 39	8.547 218	71.46 234
	15	54.622 294	0 00 202 1	53.89	30.11 200	15.955 276	60.88	8.765 256	69.12 241
70	25	54.910	34.40 274	54.42 61	35.00 260	16.231	61.64	9.021	00.71 242
Dez.	5	55.252 367	31.66 246	55.03 68	32.99 222	16.539 332	62.77 148	9.311 316	64.29 236
	15	55.619 388	29.20 209	55.71 72	30.77 168	16.871 343	64.25 176	9.627 331	61.93 221
	25	56.007 395	27.11 165	56.43	29.09 107	17.214 345	66.01 202		59.72 199
	35	56.402	25.46	56.43 75 57.18	28.02	17.559	68.03	10.203	57-73
347443									-
Mittl.		53.800	59.82	55.92	67.46	13.833	54.50	7.218	85.66
sec δ,			+0.890		+2.765		0.426	_	+0.339
	a'		-19.9	+2.6	-19.9		-19.9		—19.8
b, 1	v	0.06	+ 0.13	-o.18	+ 0.13	+0.03	+ 0.14	-0.02	+ 0.14

<sup>4)</sup> Die jährliche Parallaxe (o".107) ist bereits berücksichtigt.

Ta	0.07	474) a	Muscae	476) Y Cer	ntauri m	478) 76 T	Jrsae maj.	481) β	Crucis
1.0	15	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	12h 33m	-68°48′	12 <sup>h</sup> 38 <sup>m</sup>	-48° 37′	12 <sup>h</sup> 38 <sup>m</sup>	+63° 1′	12 <sup>h</sup> 44 <sup>m</sup>	-59°21'
Jan.	I	37.09 72	1.60 158	12.981 439	36.76 186	56.25 58	71.30 96	13.443 544	24.07 162
	II	37.81 68	3.18 210		38.62	56.83 57	70.34 33	13.987 520	25.69 208
	21	38.49	5.28	1 13,030 00	40.87	57·40 54			27.77 249
	31	39.12	7.02	14.224	1 43.42	57.94 49	70.22	14.989 432	30.26 281
Febr.	10	39.67 47	10.74 322	14.569 345	46.21 294	58.43 42	71.24 149	15.421 432 374	33.07 305
	20	40.14 39	13.96	14.865	49.15 302	58.85 34	72.73 199	15.705	36.12 322
März	1	40.53 29	13.96 17.38 342 354	15.100	52.17 303	59.19 26	74.72 240	16.106 244	39.34
	II	40.82	20.02	15.300 137	55.20 296	59.45 16	77.12 270	16.350 244	42.64 331
	21	41.02	24.40 33/		-8 T6	59.61 8	79.82 .00	16.528	45.95 324
	31	41.13 2	28.02 353	15.437 87 15.524 38	61.01 285	59.69 -	82.70 295	16.641 51	49.19 311
Apr.	9	41.15 6	31.44 324	15.562 6	63.69	59.68	85.65	16.692	52.30 293
-	19	41.09 15	34.68 298	15.556	00.15	59.59 16	00.55	10.083	55.23 269
	29	40.94 21	37.66 267	T 7 700 "	08.30	59.43 22	91.30	16.619	57.92 239
Mai	9	40.73 28	40.33 231	15.425 116	70.26	59.21 28	93.80 217	16.505 161	00.31
	19	40.45 34	42.64 190	15.309 145	71.84 122	58.93 31	95.97 177	16.344 202	62.36 167
	29	40.11	44.54 145	15.164	73.06 83		97.74 132	16.142 238	64.03 125
Juni	8	39.72 42	45.99 96	14.994	72.80	58.62 58.28 34 57.08 37	99.06 85	15.904 267	05.28 0
	18	1 39.30	46.95 45	14.804 205	74.33 4	57.91 37	QQ.QI	15.037	66.08 35
	28	38.84 47	47.40 6	14.599	74-37 38	57·54 37	100.25	15.348 304	66.43
Juli	8	38.37 47	47.34 58	14.384 218	73.99 77	57.17 36	100.08 67	15.044 310	66.31 59
	18	37.90 46	46.76	14.166	73.22	56.81 56.47 34	99.41	TA.724	65.72 104
	28	37.44	45.67	13.952	72.08	56-47 34	98.25 .60		64.68
Aug.	7	37.01	44.12	13.749 -02	70.50	50.15 28	90.02	14.130 060	63.21 184
	17		42.14	13.567	68.80	55.87 23	94.57	13.073	61.37 216
	27	36.29 33	39.80 234	13.413	66.78 220	55.64 19	92.12 280	13.647 176	59.21 241
Sept.	6	36.05	37.18 281	13.297	64.58	55.45 12	80.22	13.471 115	56.80 257
	16	35.89 6	34.37	13.227 16	02.29	55.33 6	1 00.22	13.356 44	54.23 264
	26	35.83 -	31.46 288	13.211	60.01	55.27 -	82.89 350	13.312 35	51.59 261
Okt.	6	35.89 ,8	20.50	13.256	57.82	55.28	79.39 261	13.347	48.98 216
	16	36.07 29	25.83 250	13.365 175	55.82	55.37	79·39 361 75·78 363	13.465 204	46.52 221
	26	36.36 36.76 37.27 37.86	23.33	13.540	54.10	55.54	72.15 68.58 357 68.58 342 65.16 318 61.98 284	тз.660 -	44.31 186
Nov.	5	36.76	21.19 169	13.781 <sub>301</sub> 14.082 <sub>353</sub>	52.75 92	55.79 34	68.58 357	13.950 -6-	42.45
	15	37.27 50	19.50	14.082	51.83 43	56.13 40	65.16 342	14.319 431	41.02
	25	37.86 66	18.33 59	14.435 226	51.40	56.53 47	61.98	14.750	41.02 94 40.08 39
Dez.	5	38.52 70	17.74	14.831 426	51.49 61	57.00 53	59.14 241	15.235 522	39.69 18
	15	39.22	17.75 63	15.257 441	52.10	57·53 <sub>57</sub>	56.73 191	15.757 544	39.87 75
	25	39.95 73	18.38	TEDOX	53.21	58.10 57	54.82	16.301 544	40.62 130
	35	40.67	19.60	16.141 443	54.80	58.10 58.68	54.82 134   53.48	16.301 547 16.848	41.92
Mittl.	Ort	34.98	18.31	11.812	49.52	57.02	91.76	12.003	39.52
sec δ,		2.766	-2.579	1.513	-1.136	2.206	+1.966	1.962	-1.688
a,		+3.6	-19.8	+3.3	-19.8	+2.6	-19.8	+3.5	-19.7
Ъ,		+0.17	+ 0.15		+ 0.17	-0.13	+ 0.17	+0.11	+ 0.19
-			-5			J	•	G* 40	

Ψ.	ag	482) 150 G	. Centauri	483) ε Urs	sae maj.	484) δ V	Virginis	486) 8 I	raconis
	~ <del>`</del>	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	12 <sup>h</sup> 50 <sup>m</sup>	-39° 50′	12 <sup>h</sup> 51 <sup>m</sup>	+56° 16′	12 <sup>h</sup> 52 <sup>m</sup>	+3° 43′	12h 53m	+65° 45'
Jan.	I	7.193 395	59.48 185	23.078	47.90 127	35.112 323	19.53 204	4.40 63	28.76 107
	11	7.588 395	61.33	22 572 777	46.62	35.435 312	17.49 188	5.03 62	27.60
	21	7.068	63.50 240	24.058	45.06	35.747 293	15.61 166	5.65	$27.25 \frac{44}{21}$
	31	8.222	65.95 258	24.510	45.0T	36.040 266	13.95	6.25	27.46 85
Febr.	10	8.641 278	68.48 266	24.942 370	46.48 57	36.306 233	12.55	0.80 48	28.31
	20	8.919 234	71.14 270	25.312 308	47.62 166	36.539 195	11.44 80	7.28	29.75 197
März	1	9.153 187	73.84 266	25.020	49.28 210	36.734	10.64 50	7.07	31.72 230
	11	9.340	76.50 257	25.859 167	51.38	36.891 118	10.14 20	7.90 21	34.11
	21	9.482 97	79.07	20.020	53.82 268	37.009 81	9.94 6	8.19	36.83
	31	9.579 56	81.50 225	26.121 25	56.50 280	37.090 47	10.00 28	8.30 2	39.77 302
Apr.	9	9.635 17	83.75 205	26.146	59.30 281	37.137 16	10.28 48	8.32	42.79 300
	19	$9.652 \frac{17}{18}$	85.80	26.106	02.11	37.153 =	10.76 62	0.25 .6	45.79 286
	29	9.634 50	87.60	26.007	64.82 252	37.T/12	11.38 72	8.09	48.65 262
Mai	9	9.584 78	89.14	25.05/	67.34 225	37.107	12.10	7.86 29	51.28 231
	19	9.506 104	90.39 94	25.663 228	69.59 190	37.052 55	12.89 83	7.57 34	53.59 191
	29	9.402 126	91.33 61	25.435 255	71.49 151	36.979 <sub>87</sub>	13.72 83	7.23 39	55.50 147
Juni	8	9.276	91.94 28	25.180 253	73.00 107	26.802	14.55 80	6.84 40	56.07
	18	9.132	02.22	24.907 285	74.07 60	36.793 107	T5.25	0.44	57.96 47
	28	I X 072	92.17	24.622 288	74.67	1 26 686	16.12	6.02 43	58.42
Juli	8	8.802	91.77 72	24.334 284	$74.79 \frac{12}{36}$	36.572	16.82 61	5·59 43	58.38 56
	18	8.627 176	91.05 103	24.050 275	74.43 84	36.455 116	17.43	5.17 40	57.82 107
	28	1 8.451	90.02	23.775 256	73.59 129	36.339 112	T7 05	4.77 38	56.75 156
Aug.	7	8.283	88.71 155	23.519 232	72.30	26 227	T8 25 T	4.39 34	55.19 201
	17	8.128	87.16	23.287	70.57 213	26 722	T8.6T	4.05 30	53.18 241
	27	7.995	85.42 186	23.086 161	68.44 249	36.035 88	$18.72 \frac{11}{6}$	3.75 24	50.77 279
Sept.	6	7.891 66	83.56	22.925 116	65.95 282	35.966	18.66	3.51 18	47.98 310
	16	7.825	81.64 189	22.809 63	63.13	35.922 44	18.39 48	3.33 10	44.88 336
	26	7.801	79.75 178	22.746 4	00.05	35.910 24	17.01	3.23 3	41.52
Okt.	6	7.834 85	77.97 160	22.742 60	56.75 345	35.934 65	17.19 72	3.20	37.98 354
	16	7.919 144	76.37 132	22.802 129	53.30 343	35.999 109	16.23 122	3.25 5	34.32 371
	26	8.063 201	75.05 98	22.931 199	40.77	36.108	15.01 146	3.40 23	30.61 366
Nov.	5	8.264	74.07	23.130	1 40.25	36.262	13.55	3.63	20.95
	15	0.520	73.49 14	22 207	42.82 343	36.459 237	11.86 189	3.96 41	23.43 329
	25	8.825 346	73.35	23.729 391	39.57 297	36.696 272	9.97 203	4.37 49	20.14 295
Dez.	5	9.171 375	73.68 79	24.120 438	36.60 261	36.968 272	7.94 211	4.86 49	17.19 254
	15	9.546	74.47	24.558 472	33.99 215	37.267 316	5.83 215	5.41	14.65 204
	25	9.950 307	75.69 163	25.030	31.84 163	37.583 323	3.68 210	0.00 63	12.61 146
	35	10.335	77.32	25.522	30.21	37.906	1.58	6.63	11.15
	l. Ort	6.295	70.31	23.696	66.73	34.765	23.29	5.56	48.95
	δ, tg δ	1.303	-0.835	1.802	+1.499	1.002	+0.065	2.436	+2.221
	a'	+3.3	-19.6	+2.6	-19.5	+3.1	-19.5	+2.4	-19.5
b,	b'	0.05	+ 0.22	-0.10	+ 0.22	0.00	+ 0.23	-0.14	+ 0.23

Т:	ag	485) α Car	1. ven. sq	488) ε V	Virginis	490) <del>9</del>	Virginis	492) β C	omae1)
	· ō	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	12 <sup>h</sup> 53 <sup>m</sup>	+38° 37′	12 <sup>h</sup> 59 <sup>m</sup>	+11° 16′	13 <sup>h</sup> 6 <sup>m</sup>	-5° 13′	13 <sup>h</sup> 9 <sup>m</sup>	+28° 10′
Jan.	I	13.271 380	76.39 164	11.571 326	46.36 200	50.771 325	8.8r 203	4.388	43.26 187
	II	13.651 373	74.75	11.897	44.36	51.096 317	10.04	1726	41.39 147
	21	T4 024 3/3	73.61 63	12.214	42.59	51.413 300	112.82	5.077 <sub>325</sub>	39.92 102
	31	14.276 352	72.98 8	12.514	41.12	51.713 274	14.08		28.00
Febr.	10	14.698 322	72.90 -	12.788 240	39.97	51.987 244	16.37 148	5.702 <sub>266</sub>	38.35 6
	20	14.980 236	72.24	13.028 204	20.18	52.231 208	17.85	- CO	38.29 40
März	I	15.210	74.26	13.232	38.76 8	52.439 171	LTO.OX	5.968 <sub>227</sub> 6.195 <sub>184</sub>	38.69 82
	II	15.402	75.61 135	13.397 126	28 68	52.610	20.05 97	6.379 140	39.51 118
	21		77.32 171	13.523 88	28 OT 23	1 72 744	20 55	6 510	40.69 149
	31	15.623 38	79.30 217	13.611 52	39.42 75	52.744 98 52.842 64	21.25 48	6.617 56	42.18 171
Apr.	9	15,661	81.47	T2 662	40.17	52,006	21.40	6.672	43.89 185
1	19	15.654	83.71 224	тз.683	41.09 104	52.940 6	21.52	11	45.74 191
	29	T5.600 43	85.95 215	T2.674	42.13	52 046	21 20	6625	47.65
Mai	9	15.530 79	88.10	T2.640 34	43.23 113	52.027	21.11	6.620	49.55 181
	19	15.423	90.09 175	T2 E8E 33	44.36	52.887 60	20.71	6.557	51.36 167
				/ +		00	50	90	1
Tuni	29	15.292 149	91.84 148	13.511 89	45.47 105	52.827	20.21	6.462	53.03 148
Juni	8	15.143 163	93.32 116	13.422 102	46.52 95	52.750 90	19.64 63	0.350 128	54.51 124
	18	14.980	94.48 80	13.320	47.47 84	52.660	19.01 66	6.222	55.75 98
Tails	28	14.808 176	95.28 44	13.209 118	48.31 70	52.557 112	18.35 69	6.083 146	56.73 68
Juli	8	14.632 176	95.72 5	13.091 122	49.01	52.445 117	17.66 68	5.937 150	57.41 37
	18	14.456	95.77	12.969	49.56 38	52.328	16.98 66	5.787 150	57.78 6
	28	14.284 ,62	95.44 71	12.847	49.94 19	52.208	16.32	5.637	57.84 26
Aug.	7	14.121	94.73 .08	12.729 109	50.13	52.089	15.68 57	5.492 136	57.58 58
	17	13.972	93.65	12.620 96	50.12	51.978	15.11 48	5.356	57.00
	27	13.844 103	92.22	12.524 76	49.91	51.879 80	14.63 37	5.234 100	56.09 122
Sept.	6	13.741 70	90.44 209	12.448 51	49.47 67	51.799 55	14.26	5.134 73	54.87 151
	16	13.671 33	88.35	12.397 21	48.80	51.744 25	14.03	5.061 41	53.36
	26	13.638	05.90 262	12.376	47.88	51.719 12	13.99 17	5.020 2	51.55 207
Okt.	6	13.648	83.30	12.392	46.72	51.731 54	14.16	5.018 -	49.48 230
	16	13.707 110	80.54 297	12.449 101	45.31 164	51.785 98	14.57 66	5.059 89	47.18 251
	26	13.817 163	77.57 306	12.550	43.67 186	51.883	15.23 94	5.148 138	44.67 266
Nov.	5	13.980	74.51	12.697	41.81	52.027	16.17	5.286	42.0I 275
	15	14.195 264	71.44 202	12.888	39.76 219	52.217	17.38	5.473 222	39.26 278
	25	14.450	08.42	13.120	37.57 227	52.448 268	18.83 168	5.700	36.48 273
Dez.	5	14.766 307	65.55 263	13.389 297	35.30 230	52.716 296	20.51 186	5.980 308	33.75 260
	15	15,100	62.92	та.686	33.00 224	53.012	22.37 198	6.288	31.15 239
	25	15.476 270	60.60 192 58.68	14.002	30.76	53.327	24.35 203	6.620	28.76
	35	15.855	58.68	14.328	28.64	53.652	26.38	6.965	26.67
Mittl	. Ort	13.417	91.23	11.350	52.48	50.410	8.79	4.452	54.46
sec δ,		1.280	+0.800		+0.199	1.004	-0.091	1.134	+0.536
a,		+2.8	-19.5		-19.4	+3.r	-19.2	+2.9	-19.1
b,		-0.05	+ 0.23		+ 0.26	+0.01		-0.03	+ 0.30

<sup>1)</sup> Die jährliche Parallaxe (o"133) ist bereits berücksichtigt.

T	ag	495) Y	Hydrae	496) i C	entauri	497) ζ Ursa	ie maj. $pr$	498) α V	Virginis
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	13 <sup>h</sup> 15 <sup>m</sup>	-22° 51'	13 <sup>h</sup> 17 <sup>m</sup>	-36°23′	13 <sup>h</sup> 21 <sup>m</sup>	+55° 13′	13 <sup>h</sup> 22 <sup>m</sup>	-10°50′
Jan.	1	39.769 347	13.49 186	13.604 <sub>384</sub> 13.988 <sub>376</sub>	36.02 166	29.865 475	60.49 164	2.034 <sub>329</sub>	52.86
	II	40.110	15.35	13.988 376	37.68	30.340	58.85 105	4.303	54.81 197
	21	40.455	17.36	14.364 <sub>356</sub>	39.01	30.817	57.80 42	2.687 308	56.78 193
	31	40.777 295	19.45	14.720 328	41.77	31.280 434	57.38 =	2.995 285	58.71 793
Febr.	10	41.072 264	21.54 206	15.048 293	44.08 241	31.714 391	57.59 82	3.280 256	60.52 165
	20	41.336 228	23.60	15.341 254	46.49	32.105 228	58.41 138	3.536	62.17
März	I	41.564	25.57 -0.	15.595 272	48.91	32.443 277	59.79 -89	3.758 187	03.03
	II	41.755	27.40	15.807	51.31	32.720	61.67	3.945	64.87
	21	41.908	29.07	15.978	53.03	32.931	03.95	4.095 116	65.89 -8
	31	42.023 80	30.56	16.107 89	55.83 204	33.074 76	66.54 277	4.211 82	66.67 57
Apr.	10	42.103 48	31.85 109	16.196	57.87 186	33.150 11	69.31 286	4.293 50	67.24 37
	19	42.151 18	32.94 <sub>89</sub>	1116.248 18	59.73 166	<sup>12</sup> 33.161 <sub>49</sub>	72.17 283	4.343	67.61
	29	42.169 10	33.83 69	16.266	61.39	33.112 103	75.00 270	4.366	67.79
Mai	9	42.159 35	34.52 48	16.251 45	62.81	33.009 150	77.70 240	4.362	67.80
	19	42.124 57	35.00 29	16.206 72	64.00	32.859 191	80.19 219	4.335 49	67.67 26
	29	42.067 78	35.29 9	16.134 97	64.92 63	32.668	82.38 182	4.286 68	67.41
Juni	8	41.989	35.38	16.037 119	65.55 36	32.443	84.20	4.218 80	67.04 46
	18	41.893	35.28 30	15.918	65.91	32.192	85.61 97	4.133 100	66.58
	28	41.781	34.98 47	15.779	$65.96 \frac{3}{24}$	31.922	86.58 49	4.033	66.03 61
Juli	8	41.657 132	34.51 65	15.626 165	65.72 52	31.640 287	87.07	3.922	65.42 66
	18	41.525	33.86 80	15.461 170	65.20 81	31.353 286	87.08	3.801 126	64.76
	28	41.387	22.06	15.291 169	64.39	31.067 276	86.61 4/	3.675 126	64.05
Aug.	7	41.250 130	32.13 93	15.122	03.32	30.791 260	85.66 95	3.549 122	63.33 72
	17	41.120 118	31.09 110	14.961	62.03	30.53I 225	84.25	3.427	62.62 67
	27	41.002 98	29.99 112	14.815 122	60.55 160	30.296 203	82.41	3.316 94	61.95 61
Sept.	6	40.904 71	28.87	14.693 90	58.95 167	30.093 162	80.17 260	3.222	61.34 50
	16	40.833 37	27.78 101	14.603 50	57.28	29.931	77.57	3.152 39	60.84
	26	$40.796 \frac{37}{3}$	26.77 87	14.553 3	55.61	29.816 59	74.64	3.113	60.49
Okt.	6	40.799	25.90 67	14.550 50	54.02	29.757	71.40	3.110 =	60.32
	16	40.849 98	25.23 42	14.600	52.58 121	29.760 71	68.07 339	3.150 85	60.36 30
	26	40.947 149	24.81	14.706 164	51.37 <sub>91</sub>	29.831 141	64.54	3.235 133	60.66
Nov.	5	41.096	24.68	14.870	50.46 56	29.972	100.90 200	3.368	01.23 86
	15	41.294	24.88	15.089	49.90 17	30.183	3/ 44 2/2	3.548 224	62.09
-	25	1 41.538 282	25.42 88	15.359 214	49.73 26	30.463	53.99 321	3.772 262	03.23
Dez.	5	41.821 314	26.30 121	15.073 348	49-99 67	30.806 343	50.78 289	4.035 293	64.62
	15	42.135 335	27.51 150	16.021	50.66 108	31.203 438	47.89 248	4.328 315	66.24 180
	25	42.470 245	29.01	10.393 281	51.74	31.641 467 32.108	45.41 199	4.045 226	68.04
	35	42.815	30.75	16.774	53.18	32.108	43.42	4.969	69.96
	l. Ort	39.271	19.91	12.956	46.78	30.758	77.60	1.703	55.41
	, $tg \delta$	1.085	-0.422	1.242	-0.737	1.754	+1.441	1.018	-0.192
	a'	+3.3	-19.0	+3.4	-18.9	+2.4	-18.8	+3.2	-18.8
b,	b'	+0.03	+ 0.32	+0.05	+ 0.33	-0.09	+ 0.35	+o.or	+ 0.35

# Obere Kulmination Greenwich

т	ag	499) Grb :	2001 UMin	500) 69 H.	Urs. maj.	501) ζ	Virginis	502) 17 H.	Can. ven.
	<u></u>	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	13 <sup>h</sup> 24 <sup>m</sup>	+72°41'	13 <sup>h</sup> 26 <sup>m</sup>	+60° 14'	13 <sup>h</sup> 31 <sup>m</sup>	-0° 17'	13 <sup>h</sup> 32 <sup>m</sup>	+37°28′
Jan.	I	33.56 81	50.55 133	13.88	61.09 161	38.154 321	24.12 202	6.718 369	68.65 198
	II	34.37 83	49.22 68	14.40		38.475 319	20.14	7.087 371	66.67
	21	35.20 81	18 51	1 14.44	E8 50	38.794 306	28.00	7.458 371	65.16
	31	36.01 76	18 52	15.46 49	E8 TE 33	39.100 284	29.81	-0-0	64.17
Febr.	10	36.77 69	49.19 129	15.95 44	58.46	39.384 258	31.35	8 756 330	6272
			-		93		1	3-7	
7.62	20	37.46 61	50.48 185	16.39 39	59.39 150	39.642 226	32.62	8.463 268	63.84 63
März	1	38.07 49	52.33 234	10.70	60.89 201	39.868 191	33.62 71	8.731 225	64.47
	II	38.50 26	54.67 273	17.10 24	62.90 241	40.059 156	34.33 42	8.956	65.59
	21	38.92 22	57.40	17.34 16	05.31	40.215 121	34.75 15	9.135 132	07.12
	31	39.15 10	60.39 313	17.50 8	68.03 292	40.336 87	34.90 8	9.267 85	68.99 212
Apr.	10	13 39.25 3	63.52	17.58 1	70.95 298	40.423	34.82	9.352 42	71.11 228
	19	39.22	63.52 66.68	17.59 5	73.93 295	40.480 28	34.53 46	9.394 2	73.39 233
	29	39.07	69.75 288	17.54 13	76.88 281	40.508	34.07 58	9.396 36	75.72 231
Mai	9	38.80 37	72.63 258	17.41 18	79.69 257	40,500	33.49 68	9.360 69	78.03 221
	19	38.43 46	75.21 221	17.23 23	82.26 257	40.486	32.8T	9.291 97	80.24 202
				_		44	/+	9/	1
т.	29	37·97 <sub>52</sub>	77.42	17.00 27	84.51 187	40.442 64	32.07	9.194 122	82.26
Juni	8	37.45 57	79.19 128	16.73 30	86.38	40.378 82	31.30 77	9.072 143	84.03 149
	18	30.00 62	80.47	16.43 33	07.03	40.296 96	30.53 76	8.929 160	85.52 116
T 11	28	36.26 63	81.24 23	10.10	88.80 47	40.200 109	29.77 73	8.769	86.68
Juli	8	35.63 64	81.47 31	$15.76 \frac{34}{35}$	89.27	40.091	29.04 67	8.596 180	87.47 42
	18	34-99 64	81.16 84	15.41 34	89.24	39.972	28.37 60	8.416	87.89
	28	34·35 61	180.22	15.07 34	88.71 53	39.847 127	27.77	8.232 -0-	87.02
Aug.	7	33.74 -	78.97 185	14.73 34	87.69 150	20.720	27.25	8.050	87 55
	17	33.18	77.12 229	14.42	86.19 195	30.506	26.84 28	7.876 161	86.79
	27	32.66 45	74.83 269	14.13 25	84.24 236	30.482	26.56	7.715	85.65 151
Cant	6	ľ		_		99	-7		1
Sept.	6	32.21	72.14 305	13.88	81.88	39.383 78	26.42	7.574 114	84.14 186
	16	31.84 28	69.09 335	13.67 15	79.15 305	39.305 48	26.45	7.460 80	82.28 218
Okt.	26	31.56	05.14 357	13.52 8	76.10 331	39.257 14	26.68 45	7.380 39	80.10
UAL.	6	31.39 6	62.17 373	13.44 2	72.79 351	39.243 27	27.13 68	7.341 7	77.03 273
	16	31.33 -6	58.44 381	13.42 6	364	39.270 71	27.81 93	7.348 58	74.90 293
	26	31.39 18	54.63 379	13.48	65.64 368	39.341 118	28.74 118	7.406 113	71.97 307
Nov.	5	21.57	50.04	13.62	01.90 262	39.459 .6.	29.92	7.519 +6-	1 08.00
	15	31.88	47.15 348	13.84	1.10 1.1 040	39.624 209	31.34 165	7.686 220	
	25	02.02 44	43.67 318	14.13 37	54-84 325	39.833 248	32.99 183	7.900 260	02.01 acr
Dez.	5	32.87 65	40.49 278	14.50 43	51.59 291	40.081 280	34.82	8.175 310	59.56 288
	TE	-							1
	15	33.52 73	37.71 229	14.93 49	48.68	40.361 40.665	36.79 204	8.485 8.828 343	56.68 261
	25	34.25 80	35.42	15.42 51	46.20 196	40.665 40.982 304 40.982	38.83 <sub>206</sub> 40.89	362	54.07 51.82 225
	35	35.05	33.70	15.93	44.24	40.902	40.09	9.190	31.02
Mittl.	. Ort	36.07	69.77	15.09	78.76	37.990	23.38	7.129	81.24
sec δ,	tg δ	3.363	+3.211	2.016	+1.750	1.000	-0.005	1.260	+0.767
a,		+1.5	-18.7	+2.2	-18.6		-18.5	+2.7	-18.4
b,	b'	-0.20	+ 0.36	0.11	+ 0.37		+ 0.39	-0.05	+ 0.39

m.	. ~	504) ε C	entauri	507) τ I	Bootis	509) η Urs	sae maj.	510) 89 3	Virginis
Ta	ag.	AR.	Dekl.	AR.	Dekl	AR.	Dekl.	AR.	Dekl.
194	40	13 <sup>h</sup> 36 <sup>m</sup>	-53° 9′	13 <sup>h</sup> 44 <sup>m</sup>	+17°44′	13 <sup>h</sup> 45 <sup>m</sup>	+49° 36′	13 <sup>h</sup> 46 <sup>m</sup>	-17°50′
Jan.	I	5.063 488	27.36 108	24.465 325	72.19 212	9.795 420	29.24 197	36.626	4.02
	11	5.551 482	28.44 153		70.07 183	10.215 429	27.27	36.962	5.77 185
	21	6.033 464	29.97 192	25.116 317	68.24	10.644 421	05 85	37,206 334	7.62
	31	6.497 433	31.89 224	25.433 299	66.76 108	11.065 401	25.02	27.610	9.51 185
Febr.	10	6.930 433	34.13 249	25.732 273	1 6r 6x	11.466 369	04 80	37.923 <sub>278</sub>	11.36 178
1 001.	10	371			0/		7.	-	
	20	7.324 348	36.62 268	26.005 241	65.01 25	11.835 327	25.23 99	38.201	13.14 166
März	I	7.072	39.30	20.240	64.76	12.162	26.22	38.448	14.80
	II	7.971 246	42.09 286	20.453	64.92	12.439 222	27.73	38.661	10.30
	21	8.217	44.95 285	26.623	65.46	12.661	29.70	38.840	17.62
	31	8.411	47.80 278	26.756 97	66.33	12.826	32.02 258	38.984 111	18.76 94
Apr.	10	8.552	50.58 267	26.853 62	67.47	1812.934 52	34.60 273	39.095	19.70
•	19	1 × 04 €	53.25 250	26.015	68.81 134	T2 086	37·33 <sub>277</sub>	1830.T74 /9	20.45
	29	8.687	55.75 230	26.046	70.29	T2.085	40.10	20 222 49	21.02
Mai	9	8.682	58.05 205	26.047	71.84 155	12.025	42.81 257	39.244 =	21 42
	19	8,633	60.10	26.921 26	73.39 151	T2 84T 9T		20.220	27 66
	- 9	93			_	-33		30	21.00
	29	8.540	61.86	26.870	74.90	12.708 167	47.71 203	39.209 54	21.75 6
Juni	8	8.408 168	63.30	26.798	76.32	12.541	49.74 167	39.155	21.69 20
	18	8.240	64.37 70	26.707 109	77.59 110	12.346 218	51.41	39.080	21.49 32
	28	8.041	65.07 29	26.598	78.69 89	12.128	52.68 83	38.986	21.17 44
Juli	8	7.815 245	$65.36 \frac{12}{12}$	26.475	79.58 68	11.893 246	53.51 38	38.875 125	20.73 56
	18	7.570 256	65.24	26.342	80.26	11.647 251	F2 90	38.750	20.17
	28	7.314	64.71	26.202	80.60 43	11.396 250	52.8T	1 2X 6TC	10.52
Aug.	7	7.314 <sub>259</sub> 7.055 <sub>252</sub>	62 78 93	26.059 141	80.87	11.146	52 26 33	28 476 139	TR 78 /4
	17	6.803 252	62.49 164	25.918	80.80	10.904 226	52.25 144	28 227	TE 08
	27	6.571 202	60.85	25.785 118	80 45 35	10.678 202	50.81 186	38.206	TH TH
	- /				03	1			1
Sept.	6	6.369 160	58.94 212	25.667	79.82	10.476	48.95 225	38.090	16.33 79
	16	6.209	56.82 226	25.570 69	78.92	10.306	46.70	37.996 65	15.54
	26	0.102	54.56	25.501 34	77.74	10.175 83	44.11	37.931 27	14.84 57
Okt.	6	6.057	52.26	25.467 6	76.29	10.092 29	41.20	37.904 16	14.27
	16	6.083 100	50.01 210	25.473 50	74.57 196	10.063	38.04 334	37.920 <sub>63</sub>	13.88
	26	6.183	47.91 186	25.523 00	72.61 217	10.094	34.70 347	37.983 113	13.71
Nov.	5	1 0.300	46.05	25.622	70.44	TO.T80 95	31.23 347 31.23 351	38.096 164	7-0- 9
	15	6.612 320	44.51	25.022 148 25.770 101	68.08 248	10.350 224	27.72	38.260 211	-1-0
	25	6.932 380	44.51 114	25.964 <sub>236</sub>	65 60	10.574 285	27.72 346 24.26 331	38.471	14.18 67 14.85 97
Dez.	5	7.312 428	43.37 68	26.200	65.60 254 63.06 252	10.859 337	20.95 306	38.724 289	15.82 97
								1	
	15	7.740 462	42.50	26.473 301	60.54 244	11.196	17.89 272	39.013 314	17.06
	25	8.202 480	42.81 80	26.774 320	58.10 228	11.575 410	15.17 229	39.327 330	18.53 167
	35	8.682	43.61	27.094	55.82	11.985	12.88	39.657	20.20
Mittl	. Ort	4.326	43.03	24.598	78.40	10.668	43.89	36.371	9.81
sec δ		1.668 -	- 1.335	1.050	+0.320	1.543	+1.175	1.051	-0.322
a,		+3.8	-18.3	+2.9	-18.o	+2.4	-18.0	+3.3	-17.9
Ъ,	b'	+0.08 -	+ 0.41	-0.02	+ 0.44	-0.07	+ 0.44	+0.02	+ 0.45

Т	ag	512) ζ C	entauri	513) η I	Bootis	517) 11	Bootis	516) τ '	Virginis
	ъ	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	13 <sup>h</sup> 51 <sup>m</sup>	-46° 59′	13 <sup>h</sup> 51 <sup>n</sup>	+18°41'	13 <sup>h</sup> 58 <sup>m</sup>	+27°40'	13 <sup>h</sup> 58 <sup>m</sup>	+1° 49′
Jan.	I	47.600 439	22"83 106	49.419 325	45.75 216	26.825 37.160	23.91 220	35.398 317	62.46
	II	40.039	23.89	49.744 328	43.59 186	2/.100	21.71 183	35.715 319	60.44
	21	48.477	25.33 178	50.072	41.73	21.701 006	19.88	36.034 311	58.54
	31	48.901	27.11	50.392 303	40.22	27.837 320	18.50	36.345 295	ED 82
Febr.	10	49-302 368	29.18 227	50.695 278	39.12 68	28.157 295	17.60 41	36.640 272	55.33 121
	20	49.670 330	31.45 242	50.973 248	38.44 24	28.452 265	17.19	36.912	54.12 91
März	I		33.87 202	51.221	38.20 18	28.717	17.28	37.150	53.21 60
	II	50.288	36.39 255	51.435 178	38.38 56	28.947	17.85	37.369 180	52.61
	21	50.532 108	38.94 252	51.613	38.94 90	29.138	18.84	37.549 147	52.32
	31	50.730 153	41.47 246	51.755 105	39.84 118	29.290 113	20.19 165	37.696	52.30
Apr.	10	50.883 110	43.93 235	51.860	41.02	29.403 75	21.84 186	37.810 83	52.54 46
	20	2050.993 66	46.28 221	51.930 38	42.41	29.478 39	23.70	2137.893 53	53.00 62
Mat	29	51.059 25	48.49 202	51.968 8	43.94 161	29.517 6	25.69 204	37.946 26	53.62 75
Mai	9	51.084 15	50.51 180	51.976 =	45.55 161	29.523 26	27.73 202	37.972 0	54.37 83
	19	51.069 54	52.31 155	51.956	47.16	29.497 53	29.75 192	37.972 25	55.20 89
	29	51.015 90	53.86	51.911 68	48.73 146	29.444 79	31.67 176	37-947 47	56.09 90
Juni	8	50.925 124	55.13 96	51.843 88	50.19 122	29.365 79	33.43	37.900 68	56.99 88
	18	50.801 154	56.09 62	51.755 107	51.51 114	29.263	34.98	37.832 87	57.87 84
T. 11	28	50.647 180	56.71 28	51.648 121	52.65 93	29.141 138	36.29 103	37.745 104	58.71 78
Juli	8	50.467 202	56.99 8	51.527 134	53.58 79	29.003	37.32 72	37.641 117	59.49 70
	18	50.265 216	56.91	51.393 142	54.28	28.851 160	38.04 39	37-524 128	60.19 61
	28	50.049	56.47	51.251	54.73	28.001	38.43 6	37.396	60.80
Aug.	7	49.827 770	55.68	51.105	54.92	20.520 2	38.49 28	37.262	61.30
	17	49.607 209	54.56	50.960	54.83 36	1 28.362	38.21 62	37.128 130	61.66
	27	49.398 186	53.15 166	50.823	54.47 65	28.200 143	37·59 <sub>97</sub>	36.998 117	61.88
Sept.	6	49.212	51.49 185	50.699 104	53.82	28.063 121	36.62	36.881 99	61.94 12
	16	49.000	49.64 198	50.595 76	52.89 93	27.942	35.33 162	36.782 72	61.82
01.	26	48.951 55	47.66 201	50.519 42	51.67 150	27.848 58	33.71 192	36.710 40	61.50
Okt.	6	48.896 5	45.65 196	50.477 2	50.17 176	27.790 16	31.79 220	36.670	60.95 78
	16	48.901 71	43.69 183	50.475 43	48.41 201	27.774 30	29.59 245	36.670 44	60.17
22.0	26	48.972 141	41.86 161	50.518 91	46.40 223	27.804 81	27.14 265	36.714 90	59.15 127
Nov.	5	49.113 208	40.25	50.609	44.17	27.885	24.49	36.804 120	57.88
	15	49.321 272	38.94 95	50.750 ,88	41.70	20.010 .0.	21.69	30.943 186	56.38 17
20	25	49.593 228	37.99 54	50.938	39.23 250	28.202	18.80 289	37.129 227	54.07 188
Dez.	5	49.921 374	37.45 10	51.169 270	36.64 258	28.432 271	15.91 282	37.356 263	52.79 200
	15	50.295 409	37.35 36	51.439 298	34.06 249	28.703 304	13.09 266	37.619 292	50.79 207
	25	50.704 430	37.71 79	51.737 318	31.57 232	29.007	10.43 240	37.911 210	48.72
	35	51.134	38.50	52.055	29.25	29.334	8.03	38.221	46.65
	. Ort	47.093	37.37	49.609	51.89	27.204	32.37	35.410	62.81
	, tg ô	1.466	-1.072	1.056	-+0.338	1.129	+0.524	1.001	+0.032
a,		+3.7	-17.7	+2.9	-17.7	+2.7	-17.4	+3.1	-17.4
Ъ,	6	+0.06	+ 0.47	-0.02	+ 0.47	-0.03	+ 0.49	0.00	+ 0.49

OSERW

т.	ag	518) β (	Centauri	521) α I	Draconis	520) & (	Centauri	522) 12 (	d Bootis
	a <sub>5</sub>	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	13 <sup>h</sup> 59 <sup>m</sup>	-60° 4'	14 <sup>h</sup> 2 <sup>n</sup>	+64°39'	14 <sup>h</sup> 3 <sup>m</sup>	-36° 4'	14 <sup>h</sup> 7 <sup>m</sup>	+25"22"
Jan.	ı	34.70	46.56	43.72 57	27.72 195	8.886 380	20.43 123	39.314 329	23.19 224
oun.	11	34·79 <sub>55</sub> 35·34 <sub>58</sub>	47.16	44.29 59	25.77 <sub>135</sub>	9.266 382	21.66	39.544 329	20.95 189
	21	35.34 58	48.25	44.88 59	24 42	9.648 382	23.19 176	39.643 335	
	31	35.92 56 36.48 52	40.70	45.00 59	2272		24.95 193	39.978 331	
Febr.	10	37.01 53	49.79 193	45·47 58	23.73 2	10.020 354	26.88 204	40.309 318	17.59 102 16.57 53
1.001.	10	37.01 49	51.72 227	46.05 54	23.71 64	10.374 327	1	40.627 295	73
	20	37.50 44	53.99 253	46.59 <sub>48</sub>	24.35 126	10.701 295	28.92	40.922 267	16.04 4
März	I	37.94 20	50.52	47.07 42	25.61 183	10.996	31.03 212	41.189 234	16.00 42
	11	38.33	59.20 287	47.49 21	27.44 230	11.256	33.15 209	41.423	16.42
	21	38.00 28	62.13	47.83 26	29.74 268	11.479 -8-	35.24 201	41.620	17.27
	31	38.94 21	65.07 295	48.09 17	32.42 294	11.664 148	37.25 191	41.780	18.50 153
Apr.	10	39.15	68.02 291	48.26 8	35.36 309	11.812	39.16 178	41.902 85	20.03 175
	20	39.30	70.93 279	48.34	38.45	11.923 75	40.94 162	41.987 51	21.78
	29	39.39 3	73.72 261	48.33 8	41.50 201	11.998 40	42.57	42.038	23.68 106
Mai	9	39.42	76.36 243	48.25	44.02 286	12.038 7	44.02 127	42.055	25.64 106
	19	39.39 8	78.79 217	48.08 23	47.48 259	12.045 =	45.29 106	42.042	27.60 189
	29	39.31	80.96 186	47.85 28	50.07 224	12.020 56	46.35 83	42.000 68	29.49 175
Juni	8	39.17	82.82	47.57 34	52.31 183	11.964 86	47.18 59	41.932	31.24
	18	38.98 23	84.33	47.23 38	54.14 137	11.878	17 77 39	4T 840	32.81 134
	28	30.75	185.46	46.85 40	55.51 87	11.766	48.11 8	41.727 130	34.15 108
Juli	8	38.48 30	86.17 27	46.45 43	56.38 36	11.629 156	48.19 18	41.597 146	35.23 78
	18	38.18	86.44	46.02	r6 n4	11.473 171	48.0T	41.451 156	26.OT
	28	37.85 33	86 07	45.58 43	56.58 68	11.302 180	17 56 45	41.295 162	36.50 49
Aug.	7	$37.52_{33}$	85.65 106	45.15 43	55.90 118	11.122	46.86	41.133 163	26.66
Ü	17		84 70	44.73 40	54.72 167	10.941	45.92 115	40.970 158	26.40
	27	36.88 31	83.13 181	44.33 37	53.05 213	10.767 174	44.77	40.812	36.00 83
Sept.	6	36.60 24	1		1		t	40.667	03
copt.	16	36.36 24	81.32	43.96 <sub>32</sub> 43.64 <sub>26</sub>	50.92	10.609 133	43.46	40.542	35.17 115
	26	36.19 11	76 88 235	43.04 26	48.38 291	TO 277 99	42.04 149	10 110	34.02 148
Okt.	6	26.08	440	43.38 20	45.47 323	10.377 56	40.55 148	40.442 65	32.54 178
OKU.	16		74.42 250	43.18 12	42.24 348	10.321 5	39.07 140	40.377 24	30.76 206
		7	71.92	43.06 3	38.76 366	10.316	37.67 125	40.353 22	28.70 232
3.7	26	36.13 16	69.49 226	43.03 5	35.10 376	10.367	36.42 103	40.375 71	26.38 254
Nov.	5	36.29	07.23	43.08	31.34 200	10.477 .60	35.39 75	40.446	23.04 270
	15	30.54	65.24 163	43.23	41.31 200	10.040	34.64 42	40.509 173	21.14 280
	25	30.00 41	63.61	43.40	1 23.09	10.072	34.22 6	40./42 220	18.34 -84
Dez.	5	37.29 47	62.39 73	43.82 41	20.40 349	11.148 318	34.16 =	40.962 262	15.50 279
	15	37.76	61.66	44-23 49	17.20 280	11.466	34.48 <sub>69</sub>	41.224 295	12.71 266
	25	37.76 38.28 56	61.44	44.72	14.40 231	11.817 351 12.188 371	35.17 = 103	41.519 319	10.05
	35	38.84	61.73	44.72 55 45.27	12.09	12.188	36.20	41.838	7.62
Mittl.	. Ort	34.20	64.08	45.72	43.65	8.573	32.30	39.704	30.50
sec δ,		2.005	-1.738	2.337	+2.112		_0.729	1.107	+0.474
<i>a</i> ,		+4.2	-17.4	+1.6	-17.2		-17.2	+2.7	-17.0
b,			+ 0.50	-0.12			+ 0.51	-0.03	+ 0.53

T	ag	524) 4 U	rsae min.	523) ×	Virginis	525) i V	irginis	526) a	Bootis
	~5	AR,	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	14 <sup>h</sup> 8 <sup>m</sup>	+77° 49′	14 <sup>h</sup> 9 <sup>m</sup>	-9° 59′	14 <sup>h</sup> 12 <sup>m</sup>	-5° 42′	14 <sup>h</sup> 12 <sup>m</sup>	+19°29′
Jan.	I	58.01 103	29.31 179	41.495 321	39.21 179	51.865	51.44 188	55.076 317	33.22 228
	11	59.04	27.52	41.816	41.00	52.182	53.32 185	55.393 324	30.94
	21	60.12	26.35 49	42.141 218	42.81	52.503 315	55.17 176	55.717 221	28.95 163
	31	01.23	25.86	42.459 204	44.57 165	52.010 301	56.93	56.038	27.32
Febr.	10	62.32	26.05 85	42.763 282	46.22 150	53.119 281	58.53	56.345 287	26.10 78
	20	63.36	26.90 147	43.045 255	47.72	53.400 254	59.94 118	56.632 260	25.32 33
März	1	64.30 81	20.37 202	43.300	49.03 109	53.654	61.12	56.892	24.99 11
	II	65.11 66	30.40	43.525 194	50.12 87	53.879	62.04 67	57.121 194	25.10 51
	21	65.77 49	32.89 285	43.719 162	50.99 64	54.073 162	62.71	57.315 160	25.61 87
	31	66.26	35.74 309	43.881 129	51.63 43	54.235 131	63.13 19	57.475 124	26.48 117
Apr.	10	66.57 13	38.83 321	44.010	52.06	54.366	63.32 <sub>1</sub>	57·599 90	27.65 141
	20	66.70	42.04	44.109 70	52.30	254.466 71	63.31	257.689 57	29.06
	<b>2</b> 9	66.64	45.20	44.179 42	52.35	54.537 42	63.12	57.746 25	30.62 166
Mai	9	66.40	40.30 280	44.221 15	52.26	54.580 16	62.79	57.771 3	32.28 168
	19	66.00	51.25 258	44.236 -11	52.05 32	54.596 9	62.34 53	57.768 31	33.96 164
	29	65.45 67	53.83 220	44.225 35	51.73 41	54.587	61.81 58	57·737 <sub>57</sub>	35.60 154
Juni	8	64.78 78	56.03 176	44.190 59	51.32	54.553 57	61.23 63	57.680	37.14 141
	18	64.00 86	57.79 127	44.131 80	50.85	54.496 79	60.60	57.600 102	38.55 122
	28	63.14 93	59.06	44.051 99	50.32 57	54.417 98	59.96 64	57.498 120	39.77 100
Juli	8	62.21 96	59.80 21	43.952 116	49.75 59	54.319 114	59.32 63	57·378 <sub>136</sub>	40.77 77
	18	61.25 99	60.01	43.836 129	49.16 62	54.205 128	58.69 61	57.242	41.54 51
	28	60.26 97	59.68 86	43.707 137	48.54 61	54.077	58.08 56	57.095	42.05 24
Aug.	7	59.29	58.82 138	43.570	47.93 60	53.941	57.52	56.941	42.29 5
	17	58.34 89	57.44 187	43.430	47.33 56	53.802	57.01	50.784	42.24 34
	27	57.45 82	55.57 233	43.293 126	46.77 50	53.665 126	56.58 33	56.631 142	41.90 64
Sept.	6	56.63	53.24 272	43.167 108	46.27 40	53.539 109	56.25 20	56.489 124	41.26 93
	16	55.90 62	50.52 308	43.059 81	45.87 29	53.430 84	56.05 6	56.365	40.33 123
01.1	26	55.28 48	47.44 338	42.978 48	45.58 12	53.346	55.99 12	56.266 66	39.10
Okt.	6	54.80 34	44.06 360	42.930 8	45.46	53.295 12	56.11 33	56.200 26	37.58 180
	16	54.46	40.46 376	42.922 37	45.52 28	53.283 32	56.44 56	56.174 17	35.78 206
NT.	26	54.29 0	36.70 32.88 382	42.959 <sub>85</sub>	45.80	53.315 80	57.00	56.191 66	33.72 229
Nov.	5	54.29 19	32.00	43.044	46.32 78	53.395 129	57.79 104	56.257 116	31.43 247
	15	54.48 37	29.09 367	43.179 183	47.10	53.524 177	58.83 128	56.373 166	28.96 261
Dez.	25	54.85	25.42 344	43.362	48.13 126	53.701	00.11	56.539 211	26.35 269
Dez.	5	55.40 71	21.98 311	43.589 265	49.39 148	53.922 259	01.01 167	56.750 252	23.66 268
	15	56.11 86	18.87 268	43.854 293	50.87 165	54.181 287	63.28 181	57.002 284	20.98 260
	25	56.97 97	16.19 217	44.147 313	52.52 176	54.468 309	65.09 <sub>188</sub>	57.286 308	18.38 244
	35	57.94	14.02	44.460	54.28	54.777	66.97	57.594	15.94
	. Ort	62.93	45.88	41.448	43.19	51.877	54.13	55-397	38.52
sec δ		4.743	+4.637	1.015	-o.176	1.005	-0.100	1.061	+0.354
a,		-0.2	-16.9	+3.2	-16.9	+3.1	-16.8	+2.8	<b>—16.8</b>
b,	0	-o.26	+ o.53	+0.0I	+ 0.54	+0.01	+ 0.55	-0.02	+ 0.55

Ta	ıe	527) λ	Bootis	531) &	Bootis	534) p	Bootis	535) Y	Bootis
	.0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
194	40	14 <sup>h</sup> 14 <sup>m</sup>	+46°21'	14 <sup>h</sup> 23 <sup>m</sup>	+52°7′	14 <sup>h</sup> 29 <sup>m</sup>	+30°37′	14 <sup>h</sup> 29 <sup>n</sup>	+38° 33′
Jan.	I	5.199 387	35.23 227	7.905 414	26.17 233	13.975 328	54.81 237	38.866 348	62.33 241
	II		32.96	8.319 433	23.84 233	14.303 341	52.44 199		50.02
	21	L 087		8.752 439	22.06	L 14.644	50.45		F7 07 193
	31	6.389 390	20.00	0.752 439		14.986 332	48.92	20.047	r6 ra 143
Febr.	10	6.779 366	20.45	9.191 <sub>429</sub> 9.620 <sub>407</sub>	20.20	15.318 332	17 XX	40.208 337	EE 62
1 001.	10		3		- 9	3-5	47.00 51	339	33.03 31
	20	7.145 333	29.48 64	10.027 373	20.39 70	15.633 289	47.37 2	40.637	55.32 27
März	I	7.478 292	30.12	10.400	21.09 129	15.022	47.39 54	40.948	55.59 82
	11	7.770 245	31.31 160	10.730	22.38	16.180	47.93	41.225 230	56.41 131
	21	8.015	33.00	11.009	24.19	16.402	48.93 142	41.464 <sub>106</sub>	57.72
	31	8.210	35.10 242	11.232 167	26.42 256	16.587	50.35 175	41.660	59.46 209
Apr.	10	8.254				16.734 108	52.10 201	41.814 110	
Trp1.	20	8 147 93	37.52 <sub>263</sub> 40.15 <sub>275</sub>	11.399 107 11.506 Er	28.98 279	L TG 842	54.11 217	41 004	61.55 <sub>234</sub> 63.89 <sub>250</sub>
	29	*5 8.489 42	43.13 275	TT 557	31.77 <sub>290</sub> 34.67 <sub>291</sub>	16.913	56.28 226	29 4T 002	66.20
Mai	9	8.48=	$\begin{array}{c} 42.90 \\ 45.65 \\ 267 \end{array}$	4	37.58 282	T6 047 3T	58.54 226	12.010	66.39 <sub>256</sub>
2.2	19	8 427	48.32 250	11.553 55	40.40 264	16.948	60.80	42.007	68.95 253 71.48 242
	-9	1				34		49	
	29	8.348	50.82	11.394 147	43.04 238	16.916 63	62.97 203	41.958 83	73.90 223
Juni	8	8.223	53.07	11.247	45.42	16.853	65.00 _0-	41.875	76.13 197
	18	8.005	55.00	11.063	47.46	16.763	66.83	41.763	78.10 167
	28	7.880	56.58 117	10.845	49.12	10.048	68.40	41.622	79.77 133
Juli	8	7.672 225	57.75 74	10.600 266	50.35 77	16.510	69.68	41.457 184	81.10 95
	18	7.447 238	58.49 30	10.334 280	ET T2	16.353 170	70.63	41.273 199	82.05
	28	7.200	$58.49$ $\frac{30}{16}$	10.054 288	$51.12 \frac{30}{18}$	16.183 180	71 22	41.074 208	82 50 34
Aug.	7	6.966 242	r8 62	9.766 287	CT 24	16.003 185	71 47	40.866	80.00
	17	6.724 233	58.01 107	9.479 279	50.57	15.818 182	71.25	40.655 208	82.44
	27	6.491 217	56.94 150	9.200 260	49.43	15.636	70.85 88	40.447 196	81.73
Sept.	6	6.274 191	55.44 191	8.940	47.84 203	15.464	69.97 124	40.251	80.60
	16	6.083 158	53.53 229	I 8.705 .	45.81 242	15.310 129	68.73	40.074 149	79.08
	26	5.925 116	51.24 263	8.508 153	43.39 278	15.181 96	07.14	39.925 113	77.18
Okt.	6	5.809 67	48.61 293		40 6T	L T5.085	05.21	1 20 XT2	74.92 256
	16	5.742 10	45.68 293	8.257 37	$\begin{vmatrix} 40.01 & 309 \\ 37.52 & 334 \end{vmatrix}$	15.030 9	62.98 250	39.742 70	72.36 284
	26	5.732	42.50	8 220	34.18 351	15.021	60.48 274	39.723 25	69.52 300
Nov.	5	F 782	39.15 345	8.249	30.67 361	15.064 43	57.74 291	20.758	66.46
	15	5.806		8.349 170	27.06 361	15.161 97	54.83 301	39.750 93	63.25 328
	25	6.073 237	32.23 339	8.519 <sub>237</sub>	23.44 352	15.311 201	51.82	40.002	59.97 327
Dez.	5	6.310 237	28.84 339	8.756 300	19.92 333	15.512 201	51.82 304 48.78 298	40.209 257	56.70 316
	15	6.602	25.63 293	9.056	76.50	15.759 286	45.80 283	40.466	53.54 295
	25	6.939 337 7.311	22.70 256	9.409 395	13.56 <sub>263</sub>	16.045 315	42.97 258	40.765 333	50.59 264
	35	7.311	20.14	9.804	10.93	16.360	40.39	41.098 333	47.94
Mitt	l. Ort	6.172	47.36	9.195	38.78	T4 502	62.30	39.685	71.72
	$\delta$ , tg $\delta$	1.449	+1.049	1.629	+1.286	14.593	+0.592	1.279	+0.797
	a'	+2.3	-16.7	+2.1	-16.3	+2.6	-0.592 -15.9	+2.4	
	b'	-0.06	+ 0.55	-0.07	+ o.58	-0.03	+ 0.61	-0.04	-15.9 + 0.61

Ta	g	537) n Co	entauri	538) α Cei	ntauri 1)	543) Ç Bo	otis m	545) μ ነ	Virginis
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl	AR.	Dekl.
194	40	14 <sup>h</sup> 31 <sup>m</sup>	-41° 53′	14 <sup>h</sup> 35 <sup>m</sup>	-60° 35'	14 <sup>h</sup> 38 <sup>m</sup>	+13° 58′	14 <sup>h</sup> 39 <sup>m</sup>	-5° 23'
Jan.	I	41.361	29.54 76	30.88 <sub>56</sub>	4.90 19	16.521 16.826 305	62.65 223	53.507 308	50.75 181
	II	4T 76T	30.30 110	31.44	5.09 68	10.020	60.42	53.815 317	52.56
	21	12 T70	31.40	32.01 56	5.77	17.142 317	58.43	54.132 316	54.35 169
	31	12.575	32.79 164	32·57 55	6.89	17.459 308	56.73 134	54.448 307	56.04
Febr.	10	42.966 370	34.43 183	33.12 51	8.41 189	17.767 292	55·39 <sub>96</sub>	54.755 291	57.58 134
	20	43.336 342	36.26	33.63 <sub>48</sub>	10.30 218	18.059 270	54.43	55.046 269	58.92
März	I	43.070 300	38.22	34.11	12.48	18.329	53.89	55.315 242	60.03 86
	II	43.987	40.27 208	34.54 27	14.90 250	18.572	$53.76 \frac{3}{27}$	55.558 215	60.89 60
	21	44.260	42.35 200	34.91 <sub>32</sub>	17.49 271	18.786	54.03 62	55.773 186	61.49 36
	31	44.495 197	44.44 204	35.23 26	20.20 276	18.968	54.65 93	55.959 156	61.85
Apr.	10	44.692 158	46.48	35.49 20	22.96 276	19.118	55.58 118	56.115 127	61.97
	20	44.850 119	48.45 187	35.69 13	25.72 272	19.236 87	56.76	56.242 98	61.88 26
3.5 .	30	44.969 81	50.32	35.82 8	28.44 260	19.323 57	50.13	256.340 69	61.62
Mai	9	45.050 42	52.06	35.90 <sub>I</sub>	31.04 245	19.380 27	59.63	56.409 41	61.21 51
	19	45.092	53.65	35.91 5	33.49 225	19.407 -	61.18 156	56.450	60.70 59
	29	45.095 34	55.05 119	35.86	35·74 <sub>199</sub>	19.405 28	62.74 151	56.464	60.11 64
Juni	8	45.061 70	56.24 96	35·75 <sub>16</sub>	37.73 160	19.377	04.25	56.451	59.47 67
	18	44.991 105	57.20	35.59 22	39.42	19.322	05.00 128	56.411 64	58.80 67
	28	44.886	57.90	35.37 27	40.70 97	19.243	66.94	56.347 87	58.13 66
Juli	8	44.750 164	58.33	35.10 30	41.73 56	19.142	68.05 92	56.260 108	57.47 64
	18	44.586 185	58.47 16	34.80	42.29 13	19.021	68.97	56.152	56.83 60
	28	44.401	58.31 45	34.47 26	$42.42 \frac{3}{31}$	18.884	69.67	56.027	56.23
Aug.	7	44.200	57.86	34.11 26	42.11	1 18.735	70.14 23	55.888 146	55.68 48
	17	43.991	57.12	33.75 25	41.376	1 10.500	70.37 =	55.742	55.20
	27	43.784	56.10 125	33.40 33	40.21	18.425 149	70.35 29	55.595 141	54.80 31
Sept.	6	43.590	54.85	33.07 29	38.67 187	18.276	70.06	55.454 127	54.49 18
	16	43.418	53.41 159	32.78 23	36.80	18.142	69.50 84	55.327 105	54.31
01.1	26	43.279 94	51.82	32.55	34.05	18.029 82	68.66	55.222 74	54.27
Okt.	6	43.185 42	50.16	32.38	32.32	17.947 46	67.55 138	55.148 38	54.40 32
	16	43.143 -17	48.51 158	32.29	29.88 244	17.901 3	00.17 165	55.110 6	54.72 53
**	26	43.160 81	46.93 143	32.29 <sub>10</sub>	27.44 234	17.898	64.52 189	55.116	55.25 76
Nov.	5	43.241 146	45.50	32.39 19	25.10	17.042	62.63	55.169	56.01
	15	43.387	44.30	32.58	22.90 .86	1 18.030	00.52	55.272	57.01
T)	25	1 43.590 260	45.30 28	32.80 26	21.10	10.100	58.24	55.424 108	58.23 143
Dez.	5	43.864 318	42.80 21	33.22 44	19.61 106	10.370 232	55.84 245	55.622 239	59.66 161
	15	44.182	42.59	33.66	18.55 60	18.602	53.39 244	55.861 272	61.27
	25	44.539 386	42.76 55	34.15	17.95	18.809 204	50.95	56.133 206	63.01
	35	44.925	43.31	34.15 34.69	17.85	19.163	48.62 233	56.429	64.82
	l. Ort	41.220	43.40	30.64	22.89	16.893	65.02	53.666	54-30
	tg δ	1.343	-0.897	2.036	-1.774	1.030	+0.249	1.004	-0.095
	a'	+3.8	15.8	+4.6	-15.6	+2.9	-15.5	+3.2	-15.4
Ъ,	b'	+0.05	+ o.61	+0.09	+ 0.63	0.01	+ 0.64	0.00	+ 0.64

<sup>1)</sup> Ort des helleren Sterns. Die jährliche Parallaxe (0".758) ist bereits berücksichtigt.

T	ag	542) a	Apodis	547) 109	Virginis	548) α²	Librae	549) Grb 2	164 Drac
	0	AR.	Dekl.	AR.	Dek1.	AR.	Dekl.	AR.	Dekl.
19	)40	14 <sup>h</sup> 40 <sup>m</sup>	-78°47′	14 <sup>h</sup> 43 <sup>m</sup>	+2° 8′	14 <sup>h</sup> 47 <sup>m</sup>	-15°47′	14 <sup>h</sup> 49 <sup>m</sup>	+59°31′
Jan.	1	18.45 128	12.35	12.508	42.16	33.145 317	29.97 148	52.820	62.29
	II	19.73	TT.82 33		40.18 198	33.462 226	31.45 156	53.269 449	50.78 -31
	21	21.06	11.87 61	13.122 312	38.30	33.788 326	33.01	52.754	E7 81 19/
	31	22.40	12.48	13.434 305	36.60 148	34.114 318	34.58 155	54.256 505	E6 15 130
Febr.	10	23.72 126	13.61 161	13.739 289	35.12	34.432 303	36.13 146	54.761 489	55.74 71
	20	24.98 119	15.22 206	14.028 268	33.92 89	34.735 282	37.59 134	55.250 459	55.70 63
März	1	26.17 109	17.28	14.296	33.03 57	35.017 257	38.93	55.709 417	56.33
	II	27.20 <sub>96</sub>	19.72	14.539 215	32.46 26	35.274 229	40.12	56.126 262	57.58 <sub>180</sub>
	21	28.22 83	22.47	14.754 186	32.20	35.503 200	41.13 83	56.489	59.38
	31	29.05 68	25.46 317	14.939 156	32.23 31	35.703 170	41.96 66	56.789 234	61.67 266
Apr.	10	29.73 53	28.63 329	15.095 126	32.54 53	35.873 141	42.62	57.023 163	64.33
	20	30.26	31.92	15.221 96	33.07 72	36.014 112	43.11	57.186 93	07.20 309
Mai	30	30.63	35.24 329	15.317 68	33.79 86	36.126 82	43.44 20	57.279 24	70.35 313
Mai	9	2 30.82	38.53 319	15.385 40	34.65	436.208 53	43.64 7	57.303 44	73.48 307
	19	30.85 14	41.72 319 301	15.425 12	35.60 100	36.261 24	43.71 4	57.259 108	76.55 291
<b>.</b>	29	30.71	44.73 277	15.437 15	36.60 102	36.285	43.67	57.151 166	79.46 266
Juni	8	30.40 46	47.50 246	15.422	37.62	36.280	43.55	56.985 219	82.12
	18	29.94 61	49.96 209	15.381 66	38.61 94	36.247 60	43.34 29	56.766 266	84.46
T12	28	29.33 73	52.05 166	15.315 89	39.55 87	36.187 86	43.05 36	56.500	86.41
Juli	8	28.60 83	53.71 119	15.226 109	40.42 78	36.101 109	42.69 42	56.195 337	87.93 105
	18	27.77 92	54.90 68	15.117 127	41.20 67	35.992 128	42.27 48	55.858 360	88.98
	28	26.85	55.58 14	14.990	41.87	35.864 144	41.79 53	55.490 376	89.53
Aug.	7	25.88 98	55.72 41	14.850	42.41	35.720	41.26 56	55.122 381	89.57 48
	17	24.90 96	55.31	14.702	42.82 26	35.567	40.70 58	54.741	89.09 97
	27	23.94 90	54.37 146	14.553 143	43.08 8	35.412	40.12	54.366 360	88.12
Sept.	6	23.04 <sub>81</sub>	52.91 193	14.410	43.16	35.262	39.53 55	54.006	86.65
	16	22.23 67	50.98	14.279 109	43.07 29	35.126	38.98 50	53.0/3 295	84.72
01.4	26	21.56	48.65 265	14.170 80	42.78	35.012 83	38.48 40	53.378 245	82.35 275
Okt.	6	21.05 32	46.00 288	14.090	42.28 73	34.929 45	38.08 27	53.133 184	79.60 310
	16	20.73 10	43.12 300	14.046	41.55 97	34.884	37.81 10	52.949 115	76.50 338
	26	20.63	40.12	14.045 46	40.58 121	34.885 <sub>50</sub>	37.71	52.834 38	73.12 358
Nov.	5	20.75	37.13 288	14.091	39.37	34.935 101	37.81 33	52.796 45	1 60.54
	15	21.10	34.25 264	14.186	37.94 <sub>164</sub>	35.036	38.14	52.041	1 05.03 271
T)	25	21.07 78	31.01	14.330	36.30 382	35.189 201	38.71 82	52.970	367
Dez.	5	22.45 95	29.30 189	14.520 231	34.48 195	35.390 243	39.53 105	53.183 292	58.42 350
	15	23.40	27.41	14.751 265	32.53 202	35.633 278	40.58 125	53.475 362	54.92 321
	25	24.50	26.01 86	15.016	30.51 202	35.911	41.83	53.837	51.71 281
	35	25.72	25.15	15.306	28.49	36.215	43.24	54.258	48.90
	L Ort	18.60	32.52	12.759	40.78	33.259	36.88	54.800	74.01
	, $tg \delta$	5.145	-5.047		+0.037	1.039	-0.283	1.972	+1.700
a,		-+7.4	-15.3	+3.0	-15.2	+3.3	-14.9	+1.5	-14.8
Ъ,	6'	+0.26	+ 0.64	0.00	+ 0.65	-⊢0.01	+ 0.67	-0.o8	+ 0.68

T	ag	550) β U	rsae min.	551) Pi XIV	7221 Boot	552) β	Lupi	555) β	Bootis
	b	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	14 <sup>h</sup> 50 <sup>m</sup>	+74° 23'	14 <sup>h</sup> 53 <sup>m</sup>	+14°41'	14 <sup>h</sup> 54 <sup>m</sup>	-42° 53′	14 <sup>h</sup> 59 <sup>m</sup>	+40° 37′
Jan.	1	47.02 75	49.68 234	22.723 298	14.10 225	35.448 396	22.40 48	40.022	27.09 262
	II	47.77 82	47.34	23.021 312	11.85	35.844 409	22.88 82	40.356 334	24.47 218
	21	48.59 86	45.57 112	23.333 077	0.82	36.253 412	23.70	40.712 367	22.29 -60
	31	49.45 88	1111	23.648 310	8.08 138	36.665 404	24.82	41.079 366	20.61
Febr.	10	50.33 86	44.00 45	23.958 297	6.70 98	37.069 387	26.20 159	41.445 355	19.49 53
	20	51.19 82	44.23 90	24.255 277	5.72 56	37.456 262	27.79	41.800	18.96
März	I	52.01 72	45.13	24.532 252	5.16 14	37.819 224	29.54 186	42.134 <sub>20f</sub>	19.04 66
	II	1 52.14 64	46.65	24.784 225	5.02 26	38.153 201	31.40 193	42.439 270	19.70 120
	21	53.38	48.71 253	25.009 195	5.28 64	38.454 26g	33.33 тог	42.709 232	20.90
	31	53.90 39	51.24 288	25.204 164	5.92 97	38.719 229	35.28 195	42.941 190	22.57 207
Apr.	10	54-29 26	54.12	25.368 132	6.89 122	38.948 191	37.24 191	43.131 148	24.64 237
	20	54.55 11	1 57.22	25.500	8.11	39.139 152	39.15	43.279	27.01 258
	30	54.66	1 00.40	25.602	9.54 157	539.291 113	40.99	743.383 60	29.59
Mai	9	54.62	1 030/0	25.673 40	II.II 162	39.404 72	42.74 163	43.443	32.28
	19	54.46 29	66.84 293	25.713 11	12.74 164	39.476 32	44.37 148	43.462	34.99 262
	29	54.17	69.77 263	25.724 17	14.38 160	39.508	45.85 130	43.440 60	37.61
Juni	8	53.76	72.40	25.707 46	15.98 150	39.499 49	47.15	43.380	40.08
	18	53.25	74.67	25.661 72	17.48	39.450 86	48.25 87	43.283	42.32
	28	52.00 67	76.51	25.589 <sub>96</sub>	18.85	39.364 123	49.12 61	43.154 160	44.27
Juli	8	51.99 72	77.88 86	25.493 118	20.04 99	39.241 156	49.73 33	42.994 186	45.87 123
	18	51.27 76	78.74 33	25.375 136	21.03 78	39.085 183	50.06	42.808 206	47.10 83
	28	50.51	79.07	25.239	21.81 /53	38.902	50.11	42.602	47.93 40
Aug.	7	1 49.72	78.88	25.088 159	22.34 29	38.699 216	49.86 54	42.380	48.33
	17	48.94	78.15	24.929	22.63	38,483	49.32 82	42.150	48.29 48
	27	48.17 77	76.90 173	24.767	22.65 25	38.263 212	48.50 109	41.918 226	47.81 92
Sept.	6	47.44 60	75.17 220	24.610 146	22.40 53	38.051 193	47.41 130	41.692	46.89 134
	16	46.76	72.97 262	24.464 125	21.87 0.	37.858 162	46.11	41.481 .06	45.55
	26	46.15	70.35	24.339 97	21.06 110	37.695 122	44.03 160	41.295 153	43.80
Okt.	6	45.04	07.30	24.242 61	19.96	37·573 <sub>71</sub>	43.03 164	41.142	41.66
	16	45.24 28	356	24.181 19	18.58 164	37.502 12	41.39 161	41.030 63	39.17 280
	26	44.96	60.49	24.162 28	16.94 190	37.490 52	39.78 150	40.967 7	36.37 <sub>3°5</sub>
Nov.	5	1 44.81	1 30.11 40-	24.190 78	15.04	37.542	38.28	40.960 =	33·32 <sub>324</sub> 30.08 <sub>336</sub>
	15	44.81	52.91 270	24.268	12.93	37.660	30.90	41.012	30.08 336
_	25	1 44.90 20	49.18 368	176	10.04	37.844	35.87 <sub>78</sub>	41.124 171	20./2 227
Dez.	5	45.26 44	45.50 344	24.572 219	8.22 248	38.090 300	35.09 44	41.295 227	23.35 337
	15	45.70 58 46.28 60	42.06	24.791 256	5.74 247	38.390	34.65	41.522	20.04 313
	25		30.95 268	25.047 285	3.27 237	38.735 370	34.56	41.797 315	16.91 286
	35	46.97	36.27	25.332	0.90	39.114	34.84	42.112	14.05
Mittl		51.42	62.71	23.179	15.92	35.480	36.65	41.074	34.88
sec δ,		3.719	+3.582		-⊦0.262		-0.929	1.318	<b>-</b> +0.858
a,		-0.2	-14.7	+-2.8	-14.6		-14.5	+2.3	-14.2
Ъ,	b'	—o.18	+ 0.68	-o.or	+ 0.69	+0.04	÷ 0.69	-0.04	+ 0.71

T:	a or	550) 0	Librae	557) <b>Ý</b>	DOOLIS	558) ζ	Lupi	563) δ	Bootis
Jan. I 32.999 329 40.93 108 51.  11 33.328 341 42.01 125 51.  21 33.669 344 43.26 138 52.  31 34.013 337 44.64 144 52.  Febr. 10 34.350 324 46.08 147 52.		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.		
19	40	15 <sup>h</sup> o <sup>m</sup>	-25° 2'	15 <sup>h</sup> 1 <sup>m</sup>	+27°10′	15h 7m	-51°52'	15 <sup>h</sup> 13 <sup>m</sup>	+33°31
Jan.	I	32.999 220	40.93	51.676	45.61 <sub>250</sub>	57·493 <sub>448</sub>	4.33	4.021	70.19 263
	11	33:320	42.01	51.980 304	43.11	57.941 468	4.33 41	4.021 4.328 330	67.56 226
	21	33.669	43.20	52.301	40.95 176	58.409	4.74 77		05.30 0
	31	34.013	44.04	52.630 <sub>329</sub> 52.630 <sub>327</sub>	39.19 130	58.884 471	5.51	4 008 340	63.48
Febr.		34.350 337	46.08 147	$52.957 \frac{327}{315}$	37.89 79	59-355 455	6.63	5·339 <sub>333</sub>	62.17 76
	20	34.674 304	47.55	53.272 207	37.10 27	59.810	8.04 167	5.672	61.41 20
März	1	344410 -0-	49.00	53.569 272	36.83	00.242	9.71 188	7.400	61.21 7
	11	35.258 252	50.38	53.841	37.07 72	1 60.643	11.59	0.280 262	61.57 0
	21	35.511	51.68	54.083	37.79 116	01.009	13.62	0.543	02.40
	31	35.736 194	52.88 108	54.294 176	38.95 154	61.336 327	15.76	0.772	63.81 176
Apr.	10	35.930 164	53.96 96	54.470 142	40.49 183	61.620	17.97 224	6.966	65.57 208
	20	36.094	54.92 84	54.612	42.32	L 61.861	20.21	7.123 119	07.05
	30	30.228	55.76	754.718 72	44.36	02.050 146	22.44	7.242 81	69.96 216
Mai	9*)	36.330 71	56.48 60	54.790 28	46.54 222	62.202 98	24.61	7.323 44	72.42 250
	19	36.401 39	57.08 49	54.828 4	48.77 220	62.300 48	26.70 195	7.367 6	74.92 247
	29	36.440 7	57.57 36	54.832	50.97 210	62.348	28.65 178	7.373 30	77-39 236
Juni	8	36.447 25	57.93 24	54.803 59	53.07 194	62.345	30.43 156	7.343 64	79.75 218
	18	36.422 56	58.17 12	54.744 89	55.01 173	62.292 101	31.99	7.279 96	81.93 194
*	28	36.366 86	58.29 -	54.655 115	50.74	62.191 146	33.31 103	7.183 127	03.07 160
Juli	8	36.280 112	58.28	54.540 139	58.22 118	62.045 188	34.34 72	7.056 153	85.52 132
	18	36.168 135	58.14 28	54.401 160	59.40 86	61.857 224	35.06	6.903 175	86.84 96
	28	30.033	57.86	54.241	60.26	01.033	35·43 I	0.720 702	87.80 58
Aug.	7	35.879 166	57.45 54	54.067	60.79 17	61.383	35.44 35	0.535 205	88.38 18
	17	35.713	56.91 65	53.883 188	$60.96 \frac{18}{18}$	01.110	35.09 72	0.330	88.56
	27	35.543 167	56.26 74	53.695 183	60.78	60.842 267	34.37 106	6.121 206	88.34 62
Sept.	6	35-376 154	55.52 SI	53.512	60.23 91	60.575 248	33.31 137	5.915 195	87.72 103
	16	35.222	54.71 82	53.340	59.32	00.327	31.94 164	5.720	80.09
	26	35.091 100	53.88 81	53.189 122	58.05 161	60.113	30.30 183	5.545 TAG	85.27
Okt.	6	34.991 60	53.07 76	53.067 85	56.44 194	59.940	28.47	5.399 109	83.48
	16	34.931 12	52.31 64	52.982 41	54.50 223	59.837 42	20.51 201	5.290 64	81.33 246
Non	26	34.919 40	51.67 48	52.941 7	52.27 250	59.795 33	24.50 196	5.226	78.87 273
Nov.	5	34.959 95	51.19 27	52.948 60	49.77	59.828 112	22.54 184	5.213 42	76.14 296
	15	35.054 150	50.92 4	53.008	47.06 286	59.940 189	20.70 163	5.255 99	73.18 310
Dez.	25 5	35.204 <sub>201</sub> 35.405 <sub>247</sub>	50.88 = 1	53.122 166 53.288 213	44.20 295 41.25 294	60.129 261 60.390 327	19.07 <sub>135</sub> 17.72 <sub>101</sub>	5·354 <sub>153</sub> 5·5°7 <sub>2°5</sub>	73.18 316 70.08 318 66.90 316
	_		40			3 /	16.71	_	
	15	35.652 285	51.57 74 52.31 07	53.501 255	38.31 286	60.717 383	16.71 64	5.712	63.74 304
	25 35	35.937 36.251	53.28 97	53.756 <sub>288</sub> 54.044	35·45 <sub>267</sub> 32·78	61.524	16.07 23 15.84	5.964 <sub>288</sub> 6.252	60.70 <sub>283</sub> 57.87
Miles	l. Ort		·						
	$\delta$ , tg $\delta$	33.130	50.71	52.387	50.23	57.647	20.47	4.932	75.56
	a'		-0.467	1.124 +2.6	+0.513	1.620	-1.274 12.7	1.200	+0.663
u,	06	+3.5	-14.1	72.0	-14.1	+4.3	-13.7	+2.4	-13-3

<sup>\*)</sup> Bei Stern 563) lies Mai 10.

$\mathrm{T} \imath$	ıc	560) γ Tria	ang. austr.	564) β	Librae	565) 1 H. l	Jrsae min.	566) φ¹	Lupi
	*> ———	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	15 <sup>h</sup> 13 <sup>m</sup>	-68° 27'	15 <sup>h</sup> 13 <sup>m</sup>	-9° 9'	15 <sup>h</sup> 13 <sup>m</sup>	+67° 34′	15 <sup>h</sup> 17 <sup>m</sup>	-36° 2'
Jan.	r	16.18 69	16.62 66	46.149 296	40.23 158	53.24 52	16.98 268	59.216	29.59
	II	I TO.87	15.96	46.445	41.81 168	53.76 59	14.30	59.569 371	30.11
	21	17.00	15.79 32	40.750	43.39 154	54.35 62	12.10	59.940 377	30.89
	31	1 10.33	16.11	47.071 272	44.93 <sub>144</sub>	54.97 64	10.62 89	00.317	31.90
Febr.	10	73	16.90	47.303 302	46.37 129	55.61 63	9.73 20	60.691 362	33.10 135
	20	19.83 70	18.13 161	47.685 <sub>286</sub>	47.66	56.24 61	9.53 48	61.053	34.45
März	I	20.53 65	19.74	47.971 264	48.76 89	56.85 57	10.01	01.390 322	35.89
	II	21.18 60	21.71 225	48.235 241	49.65 66	57.42	II.I4	01.720 206	37.40
	21	21.78 54	23.90	48.476 215	50.31	57.92	12.80	62.016 266	30.93
	31	22.32 46	20.45 267	48.691 189	50.75 23	58.35 34	15.10 265	62.282	40.40
Apr.	10	22.78 39	29.12 280	48.880 160	50.98	58.69 25	17.75 296	62.517 202	41.96
	20	23.17	31.92 286	49.040 133	51.02	58.94 16	20.71	62.719 168	43.41 128
N/L - 2	30	23.48 22	34.78 287	49.173 104	50.89 27	59.10 6	1 43.00	62.887	44.79
Mai	10	23.70	37.65 281	1049.277 75	50.62 37	10 59.16 4	2/.10 221	63.021 97	46.10
	19	23.84 5	40.46 271	49.352 46	50.25 45	59.12 12	30.31 307	63.118 61	47.31
	29	23.89	43.17 253	49.398 16	49.80	59.00 21	33.38 284	63.179 22	48.42
Juni	8	23.85 4	45.70 220	49.414	49.30 54	58.79 29	36.22 254	63.201 =	49.39 83
	18	23.72 21	47.99 200	49.400 43	48.76 56	58.50 35	38.76	63.186	50.22 66
т з	28	23.51 29	49-99 166	49.357 70	48.20 56	50.15 42	40.93 173	63.133 89	50.88 48
Juli	8	23.22 37	51.65 127	49.287 97	47.64 56	57.73 47	42.66	63.044 122	51.36 27
	18	22.85 42	52.92 83	49.190 119	47.08	57.26 56.76 56.23	43.91 75	62.922	51.63 6
	28	22.43	53.75 37	49.071 138	46.54	56.76	44.66	02.771	51.69 16
Aug.	7	21.97 49	54.12	48.933	46.02 48	50.23 22	44.90 29	62.596	51.53 39
	17	1 21.48	54.00 60	48.782	45.54 44	55.00 21	44.61 82	02.405	51.14 61
	27	20.90 48	53.40 107	48.624	45.10	55.14 53	43.79 133	62.205 199	50.53 81
Sept.	6	20.50 45	52.33 151	48.467 148	44.73 30	54.61 <sub>50</sub>	42.46 181	62.006 186	49.72 98
	16	20.05	50.82	48.319	44.43 19	54.11 15	40.65	61.820	48.74
01.	26	19.65 22	48.91	48.189	44.24 7	53.66	38.38	01.057	47.62
Okt.	6	19.33	40.08	48.087 68	44.17	53.26 32	35.69 305	01.527 87	46.40
	16	19.11	44.21 262	48.019 26	44.26 27	52.94 24	32.04 336	61.440 35	45.16
'N' T	26	19.00	41.59 267	47.993 21	44.53 47	52.70	29.28 360	61.405	43.94 113
Nov.	5	19.00 14	38.92 260	48.014 71	45.00 68	52.50	27.00	61.427 83	42.81 08
	15	19.14 26	36.32	48.085	45.68	$5^2 \cdot 53 = \frac{3}{7}$	21.03	01.510	41.03
D	25	19.40 <sub>38</sub> 19.78 <sub>48</sub>	33.88	48.207	46.58 111	52.00 18	10.12	01.054	41.00
Dez.	5	19.78 48	31.71 183	48.377	47.69 130	52.78 30	14.33 362	61.856	40.54 24
	15	20.26 58	29.88	48.592	48.99 144	53.08 39	10.73	62.111 300	40.30
	25	20.04 65	28.47	48.844 281	50.43	55.47 48	1.30 298	02.411	40.37
	35	21.49	27.52	49.125	51.98	53.95	4.40	62.746	40.72
	l. Ort	16.64	35.34	46.447	45.92	56.36	27.53	59.422	42.30
	$tg \delta$	2.724	-2.534	1.013	-o.161	2.621	+2.423	1.237	-o.728
a,		+5.6	-13.3	+3.2	13.3	+0.6	-13.3	+3.8	-13.0
Ъ,	0	+0.11	+ 0.75	+0.01	+ 0.75	-0.11	+ 0.75	+0.03	+ 0.76
								H 4	0

. m.	ag	569) γ U	rsae min.	568) μ B	ootis pr	571) t I	raconis	572) β Co	ron. bor.
1.	a.g	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	15 <sup>h</sup> 20 <sup>m</sup>	+72° 2'	15 <sup>h</sup> 22 <sup>m</sup>	+37°34′	15 <sup>h</sup> 23 <sup>m</sup>	+59° 10′	15 <sup>h</sup> 25 <sup>m</sup>	+29° 18′
Jan.	r	44.23 60	40.87 268	12.270 12.578 308	66.29 272	33.220 406	23.48 281	20.349 292	37.81 <sub>262</sub>
	II	44.83 68	38.19 215		63.57 233	33.626 451	20.67	1 20,041	35.19 229
	21	45.51	36.04 154	TO 070	61.24 187	34.077 481	18.35	20.955 326	
	31	46.25 77		T2.260 340	59.37	34.558 494	16.60		AT AT 109
Febr.	10	47.02 77	22 6T	T2 6T2 332	1 FX O2	35.052 494		27.610 329	20.50
_ 0				] 340	_ //		13	323	90
M:	20	47.79 74	33.40 48	13.958 331	57.26	35.543 474	15.04	21.933 308	28.69 36
März	I	48.53 69	33.88	14.209	57.09 41	36.017 442	15.26 88	22.241 288	28.33
	II	49.22 63	35.01 172	1 14.590 270	57.50 96	36.459 398	16.14	22.529 262	28.50 69
	21	49.85 53	30.73	14.875 246	58.40	36.857 346	17.63 202	22.791 232	29.19 116
	31	50.30 42	38.97 267	15.121 208	59.91 188	37.203 286	19.65 246	23.023 200	30.35 156
Apr.	10	50.80	41.64 298	15.329 170	61.79 222	37.489 221	22.11 280	23.223 167	31.91 189
	20	51.12 19	44.020	15.499	64.0T	37.710 153	24.91	23.390	33.80
	30	51.31 7	4/.00	15.628 89	00.40	37.863 84	27.95 317	23.521	35.95 230
Mai	10	51.38	51.07 325	15.717 49	69.10 267	37.947 16	31.12 217	23.616 60	38.25 238
	19	51.34 17	54.32 311	15.766	71.77 264	37.963 50	34.29 309	23.676	40.63 238
	29	51.17 27	57.43 289	T 5 77 5	74.41 253	37.913 114	37.38 290	22.700	43.01 229
Juni	8	50.90 36	60.32 258	T = = 44	76.94 234	37.799 173	40.28 264	23.680	45.30 214
	18	50.54 46	62.90 221	15.677	79.28 209	37.626 226	42.92	22.644 45	47.44
	28		65.11 178	15.574 135	81.37 178	37.400 275	45.22	22 567 //	
Juli	8	49.54 59	66.89 131	15.439 164	82.15	37.125 315	47.12	23.459 <sub>136</sub>	ET 06
					83.15		47.12 146	_	130
	18	48.95 65	68.20 80	15.275 189	84.59 105	36.810 349	48.58	23.323 160	52.44 106
	28	48.30 67	69.00 28	15.086 209	85.64	30.401	49.57 48	23.163 180	53.50
Aug.	7	47.63	69.28 =	14.877	80.29	30.00/ 288	50.05	22.983	54.20 34
	17	46.93	69.03 78	14.050	86.52 20	35.699	50.03	22.790	54.54
	27	46.23 67	68.25 129	14.428 226	86.32 63	35.306 393	49.49 104	22.589 200	54.50
Sept.	6	45.56 65	66.96	14.202 216	85.69 105	34.919 369	48.45	22.389 191	54.07 81
	16	44.91 59	05.18	13.986	84.04	34.550 228	40.91	22.198	53.26
	26	44.32 52	62.94 266	13.790 167	03.17	34.212 206	44.91	22.024	52.08 156
Okt.	6	1 43.80	60.28	13.623	81.30	33.916	42.40 202	21.077	50.52
	16	43.36 44	57.25 334	13.494 84	79.07 256	33.675	39.66 316	21.764 70	48.62
	26	43.03 22	53.91 357	T2 4T0	76.51 285	33.498 103	36.50 343	21.694 21	46.40 250
Nov.	5	40 ST	50.44.	TO 070	73.66	33.395 23		21.673	/13,00
	15	42.72		T2 405	73.66 308 70.58 323	$33.372 \frac{23}{62}$	29.45 373	21.704 85	41.16 291
	25	42.76 4	42.81 376	13.489 142	67.35 330	33.434	25.72 373	21.789 140	38.25 302
Dez.	5	42.94 31	39.05 361	13.631	64.05 330	33.581 229	21.99 364	21.929 190	35.23 303
								-	
	15	43.25 44	35.44 334	13.828 246	60.77	33.810	18.35 341	22.119 235	32.20 296
	25 35	43.69 55	32.10 298	14.074 <sub>288</sub> 14.362	57.62 <sub>293</sub> 54.69	34.115 372 34.487	14.94 <sub>309</sub>	22.354 <sub>272</sub> 22.626	29.24 26.45
		-	1 -9		34.09	34.407			20.43
Mitt]		48.32	51.12	13.336	71.86	35.408	32.35	21.212	41.45
sec δ,		3.244	-+3.086		+0.770		+1.676		+0.562
<i>a</i> ,		o.r	-12.8	+2.3	-12.7	•	-12.6	+2.5	-12.5
b,	0	—o.13	+ 0.77	0.03	+ 0.77	-0.07	+ 0.78	-0.02	+ 0.78

Тя	a or	573) v <sup>1</sup>	Bootis	575) Y	Lupi m	578) α Co	ron. bor.	577) Y	Librae
12	a.g	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	15 <sup>h</sup> 28 <sup>m</sup>	+41° 1'	15 <sup>h</sup> 31 <sup>m</sup>	-40° 57′	15 <sup>h</sup> 32 <sup>m</sup>	+26° 54'	15h 32m	-14° 35′
Jan.	1	45.129 311	66.48 280	7.707 365	45.80	7.912 284	53.34 260	9.561 293	19.42 128
	II	45.440 341	03.08	0.072	45.99 48	8.196	50.74 230	9.854	20.70 136
	21	45.781 257	61.29 192	0.4590	46.47 76	1 0.504.	48.44	10.105	22.06 136
	31	46.138 357	59.37 137	0.05/ 207	47.23	0.024	46.52	10.484	23.42
Febr.	10	46.502 360	58.00 77	9.254 389	48.22 119	$9.148 \frac{324}{318}$	45.05 97	10.802 311	24.74 124
	20	46.862	57.23 16	9.643 373	49.41	9.466	44.08 46	11.113 208	25.98
März	I	47.208 323	57.07 44	10.010	50.75	9.772 287	43.62	11.411	27.09
	II	47.531 205	57.51	10.307	52.21	10.059 262	43.69 -8	11.691 258	28.04 78
	21	47.826	58.52	10.092	53.75 150	10.321	44.27	11.949	28.82 60
	31	48.086	60.04 196	10.988 264	55.34 161	10.556 205	45.31 144	12.183 209	29.42 43
Apr.	10	48.308 182	62.00	11.252 231	56.95 160	10.761	46.75 178	12.392 183	29.85 27
	20	48.490	04.32	III.483	58.55	10.933	48.53	12.575	30.12
25.4	30	48.629	00.90	II.678 <sub>- 0</sub>	00.13	11.071	50.57	12.730 126	30.25
Mai	10	48.725 53	09.03 280	11.830	01.00	11.175 70	52.77	12.856	30.26
	19	48.778	72.43 277	11.955 79	03.12	11.245 34	55.06 230	12.953 66	30.17 18
~ .	29	48.788	75.20 265	12.034 37	64.48	11.279	57.36 224	13.019 35	29.99 23
Juni	8	48.757 71	77.85 245	12.071	05.73	11.279 34	59.60	13.054	29.76 28
	18	48.686	80.30	12.066 48	66.83	11.245 67	61.70	13.057	29.48
T. 21	28	48.576	82.50 188	12.018 88	67.77 73	11.178 98	03.02	13.028	29.16 36
Juli	8	48.432	84.38	11.930 125	68.50 73	11.080 126	65.29	12.969 89	28.80 39
	18	48.257 202	85.89 112	11.805 160	69.02 28	10.954 151	66.69 109	12.880	28.41
	28	48.055	87.01	11.645 _0_	69.30	10.803	07.78	12.765	28.01 43
Aug.	7	47.832	87.71 26	11.458	69.32 =	10.631 -86	68.53	12.627	27.58
	17	47.594 245	87.97	11.251	69.07	10.445	68.93	12.474 764	27.14
	27	47.349 245	87.78 64	11.032 219	68.57 76	10.250 196	$68.98 \frac{3}{33}$	12.310 166	26.70 44
Sept.	6	47.104 234	87.14 109	10.813 210	67.81 <sub>99</sub>	10.054 189	68.65	12.144	26.26
	16	1 46.870	80.05	10.603	66.82 118	9.865	67.95	11.985	25.84 36
01.	26	40.050	04.54	10.416	05.04	9.693	00.88	11.842	25.48
Okt.	6	40.471	82.01	10.203 108	04.31	9.546	05.45 1	11.725 84	25.19 18
	16	40.324 100	265	10.155 55	62.90 144	9.432 73	03.00 209	11.641 42	25.01 5
	26	46.224 47	77.66	10.100	61.46	9.359 25	61.59 237	11.599	24.96
Nov.	5	40.177	74.72 1	10.105	00.00	9.334 27	59.22 262	11.604 56	25.08
	15	46.189 73	14.24 222	10.175 126	58.78 110	9.301 80	56.60 281	11.060	25.39 <sub>51</sub>
T	25	40.202	68.21	10.311	57.68 87	9.441	53.79 202	11.768	25.90
Dez.	5	46.396	68.21 333 64.81 338	10.509 255	56.81 60	9.574 184	50.87 296	11.927 205	26.63 92
	15	46.588 244	61.43	10.764 305	56.21 30	9.758 228	47.91 290	12.132	27.55 110
	25	46.832 289	30.10	11.009 345	55.91	9.986 265	45.01 276	12.376	28.65
-	35	47.121	55.17	11.414	55.92	10.251	42.25	12.653	29.89
Mittl.		46.337	72.23	8.006	59.58	8.751	56.03	9.912	26.97
sec δ,			+o.870	1.324	<b>−0.868</b>	1.121	+0.508	1.033	-0.260
a, $a$			-12.3		-12.I	U	-12.1	+3.4	-12.1
ъ,	D	-0.04	+ 0.79	+0.04	+ o.8o	0.02	+ 0.80	+0.01	+ 0.80

H\* 40

Ta	10	582) α S	erpentis	583) β Se	erpentis	584) × S	erpentis	590) ζ Urs	sae min.
	~p	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	15 <sup>h</sup> 41 <sup>m</sup>	+6° 36′	15h 43m	+15° 36′	15 <sup>h</sup> 46 <sup>m</sup>	+18°19′	15 <sup>h</sup> 45 <sup>m</sup>	+77°58′
Jan.	I	18.045 271	49.83 205	24.302 270	30.68 234	1.484 <sub>268</sub>	32.57 <sub>242</sub>	62.61	39.65 282
• ***	II	18.316 291	47.78 193	24.572	28.34 214	1.752 291	30.15 220	62 27	36.83 234
	21	18.607 301	45.85 193	24.803	26.20 186	2.043 304	27.95	64.26	34.49 177
	31		44.13	25.166 307	24.34	2.347 309	26.05 153	65.27	32.72
Febr.	10	19.212 299	42.66	25.473 <sub>304</sub>	22.83	2.656 305	24.52	66.34 110	27 50
2 0020		i e			112				
	20	19.511 288	41.50 81	25.777 293	21.71 69	2.961 <sub>296</sub>	23.41 66	67.44 109	31.13 22
März	1	19.799 272	40.69	26.070 <sub>276</sub>	21.02 24	$3.257_{280}$	22.75 19	68.53 103	31.35 88
	11	20.071	40.25 8	20.340	20.78 -	3.537 259	$22.56 \frac{1}{26}$	69.56 96	32.23 149
	21	20.322 251	40.17 26	20.002	20.97 60	3.796 235	22.82 69	70.52 84	33.72 205
	31	20.551 204	40.43 58	26.834 207	21.57 96	4.031 210	23.51 107	71.36 69	35.77 251
Apr.	10	20.755 177	41.01 84	27.041 178	22.53 127	4.241 181	24.58 139	72.05	38.28 286
	20	20.032	41.85	27.219 149	23.80	4.422	25.97 365	72.59 36	41.14 211
	30	21.082	42.92	27.368 119	25.32 169	4.573 121	27.62 182	72.95 18	44-25 324
Mai	10	21.203 92	44.14	1827.487 89	27.01	19 4.694 89	29.44	73.13	47.49 277
	19	21.295 61	45.48	27.576 56	28.81 185	4.783 56	31.38 198	73.13 19	50.76 319
	20			, , ,		, , ,	ļ	<u> </u>	
Juni	29 8	21.356 30	46.87 139	27.632 24	30.66	4.839 23	33.36 195	72.94 35	53.95 301
Juni	18	21.386	48.26	27.656 8	32.48	4.862	35.31 186	72.59 51	56.96 274
	28		49.61	27.648	34.22 162	4.852 42	37.17 173	72.08 66	59.70 <sub>241</sub> 62.11
Juli	8	21.354 62	50.88 116	27.608 71	35.84 146	4.810 73	38.90	71.42 78 70.64 80	64.11 200
Juli	O	21.292 90	52.04 103	27.537	37.30 125	4.737 103	40.45	70.04 89	64.11 156
	18	21.202	53.07 86	27.437 126	38.55 103	4.634 129	41.78 108	69.75 97	65.67 107
	28	21.086	53.93 70	27.311	39.58 78	4.505 152	42.86 81	68.78	00.74 =6
Aug.	7	20.948	54.63	27.164	40.36	4.353 160	43.67 53	67.74	07.30 5
	17	20.794 765	55.14. 30	27.000	40.88	4.184	44.20 23	66.67	67.35 .0
	27	20.629 168	55.44 10	20.825 179	41.12	4.005 183	44.43 8	65.58 108	66.87
Sept.	6	20.461 163	55.54 12	26.646	41.07	3.822	44.35	64.50	65.87 150
•	16	20.00%	55.42 36	20.473	40.72 64	3.643 166	12.05	63.46 98	64.37 196
	26	20 140	55.06	26.313	40.08	3.477	43.23 72	62.48 89	62.41 241
Okt.	6	20.022 96	54.47 84	26.176 106	39.14 94	3.334 112	42.20	61.59 78	60.00 280
	16	19.926 58	53.63 108	26.070 68	37.91 153	3.222 74	40.85 164	60.81 63	57.20 314
	26	19.868		26.002				60.78	
Nov.		TO 8 F F	52.55 132		36.38 180	3.148 29	39.21 192	40	54.06 341
1101.	5	TO 800	51.23 156	25.978 <sub>26</sub> 26.004 <sub>-6</sub>	34.58 203	3.119 20	37.29 217	59.70 59.40	50.65 361
			49.67 176	26.004 76	32.55 224	3.139 71	35.12 237		47.04 372
Dez.	25 5	19.974 20.108 180	47.91 <sub>193</sub> <sub>45.98 <sub>206</sub></sub>	26.080 70 26.206 126	30.31 240	3.210 122	32.75 <sub>252</sub> 30.23 <sub>261</sub>	59.29 59.38	43·32 372 39.60 363
~ 041	3				27.91 249	3.332 170		-9	
	15	20.288	43.92	26.380 216	25.42 251	3.502 213	27.62 262	59.67	35.97 342
	25	20.508	41.81	26.596	22.01	3.715 250	25.00	60.16	32.55 310
	35	20.761	39.70	26.847	20.48	3.965	22.47	60.82	29.45
Mitt	l. Ort	18.606	47.33	24.986	30.20	2.219	32.57	69.31	47.76
	δ, tg δ	1.007	+0.116	1.038	+0.279	1.053	+0.331	4.802	+4.697
	a'	+2.9	-11.4	+2.8	-11.3	+2.7	-11.1	-2.2	-11.1
	b'	0.00	+ 0.82	-0.01	+ 0.83	-0.01	+ 0.83	-0.17	+ 0.83

T	n 0*	585) μ S	Serpentis	588) ε Sc	erpentis	589) β Tria	ing. austr.	593) ε Cor	onae bor.
	10	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	15 <sup>h</sup> 46 <sup>m</sup>	-3° 14′	15 <sup>h</sup> 47 <sup>m</sup>	+4° 39′	15 <sup>h</sup> 49 <sup>m</sup>	-63° 14′	15 <sup>h</sup> 55 <sup>m</sup>	+27° 2′
Jan.	1	28.656 273	47.59 168	48.778 267	28.62 198	49.34	33.78	5.158 266	60.46 267
	II	28.929	49.27 164	49.045 288	20,04	49·34 49·88 54	22.85	5.424 294	57.79 239
	21	20.220	50.91	49.333 299	24.78	50.46 62	22 25	5.718	55.40 203
	31	1 20.524	52.45	49.632 303	23.08	51.08 62	32.28	5.718 310 6.028 318	53.37
Febr.	10	29.828 301	53.84	49.935 299	21.63 116	51.70 62	32.63 35	6.346 318	51.78
	20	30.129 290	55.01 93	50.234 280	20.47 84	52.32 61	33.37 111	6.665	50.67 58
März	I	30.419	55.94 67	50.523 252	19.63	52.93 .0	34.48 145	0.975 205	50.09
	II	30.694	56.61 38	50.790	19.14 14	53.51	35.93	7.270 275	50.04 47
	21	30.949	56.99 11	51.051	19.00	54.05 50	37.66	7.545 <sub>250</sub>	50.51 95
	31	31.183 211	57.10 14	51.284 209	19.19 49	54.55 46	39.63 218	7.795 224	51.46
Apr.	10	31.394 185	56.96	51.493 183	19.68 76	55.01 <sub>40</sub>	41.81 233	8.019	52.84 174
	20	31.579	50.01	51.676	20.44	55.41 33	44.14 245	0.212	54.58 203
	30	31.738	56.06 69	51.832	21.41	55.74 27	40.59 250	8.373	50.0I
Mai	10	1931.869 103	55.37 79	51.961	22.54	56.01	49.09 222	8.500	1 58.83
	19*)	31.972 72	54.58 86	52.060 68	23.79 130	56.22	51.61 247	8.593 57	61.18 238
	29	32.044	53.72 89	52.128 38	25.09 131	56.35	54.08 238	8.650 21	63.56
Juni	8	32.086	52.83 89	52.166 6	26.40	56.40 -2	56.46	8.671 = 15	05.89
	18	32.096	51.94 86	52.172 25	27.68	56.38	58.69	8.656	08.12
T	28	32.074 52	51.08 81	52.147 56	28.90	56.29	60.71	8.606 81	70.18 183
Juli	8	32.022 82	50.27 75	52.091 86	30.01	50.12 23	62.46	8.522	72.01 156
	18	31.940 109	49.52 67	52.005 112	31.00 85	55.89 30	63.90 108	8.406	73.57 126
	28	31.831	48.85	51.893	31.85 69	55.59 21	64.98 60	8.202 168	74.83 94
Aug.	7	31.699	48.27 48	51.759	32.54 52	55.25 28	65.67 26	8.094 187	75.77 58
	17	31.549 ,62	47.79 37	51.606	33.06 34	54.87 40	65.93	7.907 200	76.35 21
	27	31.387 166	47.42 25	51.442 169	33.40 14	54·47 <sub>41</sub>	65.74 63	7.707 204	76.56
Sept.	6	31.221 162	47.17 12	51.273 164	33.54 6	54.06	65.11	7.503 200	76.41 54
	16	31.059 148	47.05	51.109	33.48	55.07 26	04.00	7.303 188	75.87 gi
01.	26	30.911	47.07	50.957	33.21 50	53.31	102.01	7.115 166	74.96 128
Okt.	6	30.784 96	47.26 36	50.827 100	32.71 73	53.01 24	00.81	6.949 135	73.68 164
	16	30.688 57	47.62 56	50.727 62	31.98 96	52.77 16	50.72 228	6.814 96	72.04 198
74.7	26	30.631 12	48.18	50.665 18	31.02	52.61 6	56.44 238	6.718 50	70.06 228
Nov.	5	30.619 35	48.95 07	50.647 30	29.82	52.55 - 5	54.00 00	$6.668 \frac{1}{1}$	67.78 254
	15	30.654 86	49.92	50.077	20.39 164	52.00	51.00 232	6.669 54	05.24
7)	25	30.740	51.10 136	50.750	20.75	52.75 25	49.34 213	0.723	02.49 280
Dez.	5	30.875 181	52.46	50.885 175	24.94 194	53.00 34	47.21 188	6.830 159	59.00 296
	15	31.056	53.98 163	51.060 215	23.00 201	53.34 43	45-33 155	6.989 205	56.64 294
	25	31.278 254	55.61 169	51.275 250	20.99 202	53.77 50	43.78	7.194 246	53.70 281
	35	31.532	57.30	51.525	18.97	54.27	42.61	7.440	50.89
Mittl		29.145	52.66	49.343	25.39	50.12	51.05	6.084	61.74
sec δ		1.002	-0.057	1.003	-+-0.081	2.222	-1.984	1.123	+0.511
a,		+-3.I	11.0	+3.0	-10.9	+5.3	-1o.8	+2.5	-10.4
Ъ,	b'	0.00	+ 0.84	0.00	+ 0.84	+0.07	+ 0.84	-0.02	+ o.86

<sup>\*)</sup> Bei Stern 593) lies Mai 20.

Та	ıg	594) δ	Scorpii	598) & D	raconis	597) ß Sc	eorpii pr	603) δ O <sub>I</sub>	phiuchi
		AR.	Dekl.	AR.	Dekl_	AR.	Dekl.	AR.	DekL
19.	40	15 <sup>h</sup> 56 <sup>m</sup>	-22° 26′	16 <sub>p</sub> c <sub>m</sub>	+58°43′	16 <sup>h</sup> 1 <sup>m</sup>	-19°38′	16 <sup>h</sup> 11 <sup>m</sup>	-3° 32′
Jan.	r	46.408 292	59.14 80	43.258 340	24.32 308	56.155 283	24.68	11.307	22.79 160
	II		50.04	12 607 319	21.24 265	56.438 305	25.59 <sub>100</sub>	11.504	24.39
	21	47.013 326	60.88	44.011	18.59 213	56.743 318	26.59 107	11.843 294	25.96
	31	47.339 330	61.90	44.456 445	16.46	57.061 323	27.66 108	12.137 300	27 44
Febr.	10	47.009 327	62.96 106	44.927 481	14.92 89	57.384 321	28.74 105	12.437 300	28.76
	20	47.996	64.02	45.408 477	14.03 21	57.705 312	29.79 98	12.737 294	29.88 89
März	I	40.313	65.05	45.005 458	13.82	58.017 200	30.77 88	13.031 283	30.77 62
	II	1 40.010	66.01 87	46.343 427	14.29 110	58.316 282	31.65 77	13.314 267	31.39 34
	21	48.900	66.88	40.770 385	15.39 ,60	58.598 261	32.42 65	13.581	31.73 7
	31	49.163 240	67.65 66	47.155 334	17.08	58.859 239	33.07 52	13.830 228	31.80 7
Apr.	10	49.403 214	68.31	47.489 277	19.28 262	59.098 215	33.59 40	14.058 205	31.63 40
	20	49.017	68.88 47	47.766	21.90	59.313 188	33.99 20	14.263	31.23
	30	49.805	69.35 38	47.980	24.83	59.501 161	34.28	14.444	30.64 73
Mai	10	49.963 128	69.73	48.129 81	27.97	59.662	34.48	14.598 126	29.91 84
	20	50.091 96	70.04 24	48.210	31.21 323	59.792 99	34.61 6	14.724 96	29.07 90
	29	50.187 61	70.28	48.223	34.44 312	59.891 65	34.67	14.820 64	28.17
Juni	8	50.248 26	70.47	48.169 117	37.56 312	59.956 30	34.60	14.884 31	27.24 93
	18	50.274 =	70.50	48.052	40.49 265	50.086	34.65	14.915 2	26.32 89
	28	50.264 45	70.66	47.874 224	43.14 231	59.981 40	34.58 7	14.913 36	25.43 84
Juli	8	50.219 79	70.67 7	47.640 283	45.45 191	59.941 74	34.46 16	14.877 68	24.59 77
	18	50.140	70.60	47.357 327	47.36	59.867 106	34.30	14.809 99	23.82 68
	28	50.030	70.47	47.030	48.83 99	59.761	34.09 25	14.710	23.T4
Aug.	7	49.893	70.26	46.669 286	49.82 49	59.628	33.84 31	14.585 146	22.55 49
	17	49.733	69.97 37	40.283	50.31	59.473	33.53 36	14.439 162	22.06 38
	27	49.559 179	69.60 44	45.881 406	50.29 53	59.303 177	33.17 40	14.277	21.68 26
Sept.	6	49.380	69.16	45.475 397	49.76	59.126	32.77	14.106	21.42 13
	16	49.203	68.66	45.078 376	48.72	58.951 164	32.34 43	13.936 161	21.29
	26	49.039	68.12	44.702	47.18	58.787	31.91 43	13.775	21.30 16
Okt.	6	48.899 108	67.58	44.359 207	45.17	58.646	31.48 38	13.634	21.46
	16	48.791 66	67.07	44.062 239	42.73 284	58.537 70	31.10	13.520 78	21.80 51
	26	48.725 18	66.62	43.823	39.89 317	58.467 23	30.80 18	13.442 35	22.31 71
Nov.	5	48.707 =	00.27	43.652		F8 111	30.62	13.407	23.02
	15	48.741 80	66.06	1 43.558 ra	33.28 344	58.472 81	30.57 = 13	13.419 62	23.93 110
_	25	48.830	00.03	43.546 73	29.05 271	50.553 T21	30.70	13.481	25.03 128
Dez.	5	48.972 192	66.18 35	43.619 158	25.94 369	58.687 184	31.01 50	13.592 159	26.31 143
	15	49.164 236	66.53	43.777 238	22.25 356	58.871 227	31.51 68	13.751 201	27.74 154
	25	49.400 272	07.08	44.015 310	10.09 332	59.098 262	32.19 84	13.952	29.28
	35	49.672	67.81	44.325	15.37	59.361	33.03	14.189	30.89
	L Ort	46.849	68.86	45.599	29.85	56.626	33.83	11.889	28.61
	, tg δ	1.082	-0.413	1.926	+1.646	1.062	-0.357	1.002	-0.062
	a'	+3.5	-ro.3	+I.2	10.0	<del>3.5</del>	-9.9	+3.1	-9.2
b,	<i>b'</i>	+0.01	+ 0.86	-0.05	+ 0.87	+0.or	<b>-</b> -0.87	0.00	0.89

Tr.	ag	606) 19 T	Jrsae min.	605) & C	phiuchi	604) γ²	Normae	608) τ I	Ierculis
1.	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	16 <sup>h</sup> 12 <sup>m</sup>	+76° 1′	16 <sup>h</sup> 15 <sup>m</sup>	-4° 32'	16 <sup>h</sup> 15 <sup>m</sup>	-50° o'	16 <sup>h</sup> 17 <sup>m</sup>	+46° 27'
Jan.	I	24.40 <sub>58</sub>	40.46 306	8.016 255	45.49 154	19.727 379	22.28	54.483 277	16.73 311
	II	24.98 72		8.271 278	47.03	1 20.100	21.62		13.62 311
	21	25.70 82	37.40 <sub>263</sub> 34.77 <sub>210</sub>	8.549 293	48.54 143	20.520 438	27.20	55.078	13.02 276
	31	26.52	32.67	8.842 300	49.97	20.958 450	27 27	EE.428	8.56
Febr.	10	27.42 94		9.142 301	51.26	21.408	27 20	EE 708 3/0	6.79 118
_ 0,521			04	1		454	]	300	
3.5	20	28.36 95	30.33 16	9.443 295	52.36 88	21.860	22.11 81	56.178 378	5.61 <sub>55</sub>
März	I	29.31 02	30.17	9.738 284	53.24 62	42.305	22.92	56.556 368	5.06
	11	30.24 88	30.68	10.022 270	53.86	1 22.737	23.96	56.924 347	5.16 72
	21	31.12 79	31.84	10.292 251	54.21 9	23.140 286	25.18	57.271 320	5.88
	31	31.91 68	33.58 226	10.543 232	54.30	23.534 356	26.57 153	57.591 287	7.19 183
Apr.	10	32.59 <sub>56</sub>	35.84 268	10.775 210	54.15 37	23.890 322	28.10 162	57.878 248	9.02 227
	20	33.15 42	38.52	10.985	53.78 55	24.212 -0.	29.72	58.126	11.29 261
	30	33.57 26	41.52	11.170	53.23 69	24.490	31.43 176	58.331	13.00 -00
Mai	IO	33.83 11	44.72	11.328	52.54 80	1 24.739	33.19 178	58.490	16.76
	20	33.94 5	48.01 328	11.459 100	51.74 86	24.936	34.97 176	58.602 62	19.77 306
	29	33.89 20	51.29 317	11.559 69	50.88 88	25.084 98	36.73 172	58.664	22.83 301
Juni	8	33.69 34	54.46 297	11.628 35	50.00 89	25.182 44	38.45 162	$58.677 \frac{13}{36}$	25.84 287
	18	33.35 48	57.43 268	11.663 35	49.11 85	25.226 44	40.07	58.641 84	28.71 266
	28	32.87 60	60.11	11.665	48.26 81	25.215 65	41.58	58.557	31.37 237
Juli	8	32.27 71	62.44 192	11.632 33	47.45	25.150 117	42.92	58.427	33.74 204
	18	31.56 79	64.36 146	TT 567	16 77	25.033 165	44.04 87	58.256 210	35.78 165
	28	30.77 86		11.507 96	46.05	24.868	44 OT	58.046	37.43 123
Aug.	7	29.91 92	66.80	11.348 145	45 45 30	24.661 241	45 55	57.804 267	1 28 66
U	17	28.99 94	67.27	11.203 162	44.00		45.70	57·537 <sub>285</sub>	20.42
	27	28.05 94	67.22	11.041	44.99 <sub>38</sub> 44.61 <sub>28</sub>	24.420 <sub>264</sub> 24.156 <sub>276</sub>	45 75 T	57.252 293	20.72
C 4			57				3.	_	
Sept.	6	27.09 93	66.65 108	10.870 171	44.33	23.880	45.37 70	56.959 292	39.56 66
	16	26.16 89	65.57 158	10.699 162	44.18 2	23.000	44.67 101	56.667	38.90 113
Okt.	26 6	25.27 84	63.99 205	10.537 143	44.16	23.348 228	43.66	56.388 257	37.77 160
OKU.	16	24.43 74	61.94 249	10.394 116	44.28 28	23.120 184	42.38	50.131 222	36.17 203
	10	23.69 64	59.45 287	10.278 81	44.56 46	22.936 129	40.88 167	55.908 180	34.14 244
	26	23.05 50	56.58 320 53.38 346	10.197 38	45.02 64	22.807 63	39.21	55.728 127	31.70 281
Nov.	5	22,55	53.38 346	10.159	45.66	22.744	37.40	55.601 68	28.80
	15	10	49.92 364	10.168	46.50 103	22.754	35.69 170	55·533 <sub>4</sub>	25.79 333
70	25	22.01 2	49.92 364 46.28 372	10.227 109	47.53	22.039	33.99 <sub>157</sub>	55.529 62	25.79 333 22.46 348
Dez.	5	21.99 16	$\begin{array}{c c} 40.28 & 372 \\ 42.56 & 369 \end{array}$	10.336	48.73	22.998 230	32.42 136	55.591 127	18.98 353
	15	22.15	38.87_356	10.492	50.08 147	23.228	31.06	55.718 190	15.45 347
	25	22.48 49	35.31 <sub>330</sub>		51.55	23.522 348	29.94 82	55.908 246	
	35	22.97	32.01 330	10.690 235	53.10	23.870	29.12	56.154	8.69
Mittl.	. Ort.	30.32	45.03	8.606	51.61	20.400	26.00		TO 42
sec δ,		4.142	45.92 +4.020	1.003	-0.080	20.429	36.99 —1.192	56.092 1.452	19.43
a,		-1.7	-9.I	+3.2	-8.9	+4.5	-1.192 $-8.8$	+1.8	+1.052 $-8.6$
b, 1		-0.12	+0.89	0.00	0.9	+4.5	0.0	, 1.0	0.0

Ta	a.o	609) y I	Herculis	615) η D	raconis	611) γ	Apodis	616) a 8	Scorpii
	<sup>4</sup> 5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	16 <sub>p</sub> 10 <sub>m</sub>	+19°17′	16 <sup>h</sup> 23 <sup>m</sup>	+61°38′	16 <sup>h</sup> 24 <sup>m</sup>	-78°45'	16 <sup>h</sup> 25 <sup>m</sup>	-26° 17′
Jan.	I	15.410 244	35.66 248	7.64	54.92 323	7.63	41.36 192	42.882	5T.22
	II	15.654 271		7.08 34	51.69 284	8.66	39.44	42 160 2/0	51.33 <sub>43</sub>
	21	15.925 290		7.98 40 8.38 45	48.85 234	9.83 126	37.97 <sub>101</sub>	43.466	51.76 57
	31	16.215 300	28.90	8.83 45	46.51 177	11.09 133	26.06	43.789 323	52.33 69
Febr.	10	16.515 300	1 27 20	0.22 49	44.74	12.42	26 44	44.121	53.02 76 53.78 80
20011			123	9.32 51	44.74 113		_	335	
3.52	20	16.819 300	26.03 76	9.83 52	43.61 45	13.79 136	36.42	44.456	54.58 80
März	1	17.119 200	25.27 29	10.35	43.16 =	15.15 134	36.87 90	44.786 320	55.38 79
	II	17.409 275	$24.98 \frac{1}{18}$	10.05 48	43.39 89	16.49 128	37.77 132	45.106 306	50.17
	21	17.684 275	25.16 63	11.33	44.28	17.77 121	39.09 172	45.412 289	50.92 60
	31	17.940 234	25.79 104	11.77 39	45.78 205	18.98	40.81 205	45.701 269	57.61 63
Apr.	10	18.174 209	26.83 140	12.16	47.83 250	20.09 99	42.86 234	45.970 246	58.24 58
	20	18.383	28.23 160	12.50	50.33 287	21.08 87	45.20	40.210	58.82
	30	18.564	29.92	12.76	53.20	21.95 71	47.79 278	46.437	59.34 47
Mai	10	10.710	31.82	12.96	50.32	22.66	50.57	40.030	59.81
	20	10.037 88	33.86 211	13.08 5	59.58 330	23.20 38	53.48 297	46.792	60.24 43
	29	<sup>27</sup> 18.925	35.97 212	13.13	62.88 <sub>323</sub>	23.58	56.45 295	46.920	60.63
Juni	8	18.978 53	38.09 204	13.10 10	66.11 308	23.77	50.40 00	47.0T2 93	60.99 32
	18	18.996 18	40.13	13.00	69.19 284	$23.78 \frac{1}{18}$	62.28	47.068 55	01.31 20
	28	18.078	42.05 176	12.83	72.03 253	22.60	65.01 250	17.081	61.59
Juli	8	18.925 86	43.81	12.60 23	74.56 215	23.24 53	67.51 220	47.061 62	61.82 16
	18	18.839	45.35 129	12.30	76.71 172	20 77	69.71 183	46,000	61.98 8
	28	TYMAA	46.64 103	1 11.05	78.43 126	22.02	71.54 140	46 OOT 90	62.06
Aug.	7	T8 578 177	17 67	11.56 42	70.60	21.22	72 04	46 770	62.06
J	17	18.411	18.40	11.14 45	80.46 77	20 27 91	7287	46.613 178	61.95
	27	18.228 192	48.82	10.69 45	80.72 27	19.33 102	$73.07 \frac{42}{13}$	46.435 189	61.74 31
Sept.	6	18.036	48.92		80.45	18.31 101	<b>24.76</b>	46.246	
~cPv.	16	17.844 184	48.70	10.23 45	79.67 78	17.20	73.49 67	46.055 183	61.43 41
	26	17.660 167	40 7 7 33	9.78 44	78.38 178	16 25 93	72.29 169	I オピ Xケウ	60.50
Okt.	6	17.493	17 26	9·34 41	76.60	15.48	70.60	45.700	50.06
0	16	17.354 104	46.05 153	8.93 36 8.57 31	74.36 224	T475 /3	68.48 212	45.576	59·37 <sub>58</sub>
				0.37 31		J-		73	
NI -	26	17.250 63	44.52 182	8.26	71.69 304	14.19 37	66.00 276	45.481 47	58.79 54
Nov.	5	17.187 15	42.70	0.03	1 00.05	13.82	03.24	45.434 6	58.25
	15	17.172 36		7.87 ~	0.7.31	13.07 8	00.33	45.440 60	57.00 33
n.	25	17.208 87	30.20 240	7.00	01.14 270	1 -3.12 31	57.30 201	45.500 116	31.41 18
Dez.	5	17.295 136	35.79 260	7.82	58.04 373	14.06 53	54.45 274	45.616 168	57.29 0
	15	17.431 182	33.19 263	7.94 20	54.31 364	14.59 74	51.71 248	45.784 215	57.29 17
	25	17.613 222	30.56	8.14 29	50.67 344	15.33 /4	49.23 214	45.999 256	57.46
	35	17.835	27.98	8.43	47.23	16.25	47.09	46.255	57.81
Mittl	. Ort	16.269	34.07	10.36	58.63	10.82	58.83	43.457	61.84
	tg 8	1.059	+0.350	2.106	$\pm 1.853$	5.133	-5.035	1.116	-o.494
a,		+2.6	-8.5	+o.8	8.2	+9.2	-8.I	+3.7	-8.o
b,		-0.01	-+0.91	-0.05	+0.91	+0.14	-+o.9I	+0.01	+0.92

T.	ag	618) ß	Herculis	619) A I	Oraconis	621) o l	Herculis	622) $\zeta$ 0	phiuchi
1.	ag	AR,	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	16 <sup>h</sup> 27 <sup>m</sup>	+21°36′	16 <sup>h</sup> 28 <sup>m</sup>	+68° 53'	16 <sup>h</sup> 32 <sup>m</sup>	+42°33′	16 <sup>h</sup> 33 <sup>m</sup>	-10° 26
Jan.	I	37.395 237	70,42	1.54 39	40-12	8.510 252	21,26	50.478 246	12.01
00111	11	37.632 266	70.42 67.85 257	1.93 48	49.12 45.88 324 45.88 284	8.762 293	34.36 <sub>311</sub> 31.25 <sub>280</sub>	50.724 273	43.23 121
	21	37.898 287	65.49 206	2.41 56	43.04 234	9.055 324	28.45 238	50.997 290	44 44
	31	38.185 300	63.43	2.97 61	40.70	9.379 345	26.07 189	51.287 300	15.62
Febr.		38.485 305	61.73 126	3.58 65	38.93	9.724 357	24.18	51.587 300	46.72
			1			357	1		9/
	20	38.790 303	60.47	4.23 66	37.81 45	10.081 358	22.86	51.891 301	47.69 81
März	1	39.093 201	59.68 79	4.89 65	37.36	10.439 351	22.15 9	52.192 202	48.50 62
	11	39.387 281	59.38 =	5.54 62	37.60 91	10.790 336	22.07 54	52.485 281	49.12
	21	39.668 262	59.57 67	6.16 6.72	38.51 152	11.126 336	22.61	52.766 266	49.54 21
	31	39-930 241	60.24 110	6.73 50	40.03 207	11.439 285	23.73 164	53.032 248	49.75 r
Apr.	10	40.171	61.34	7.23 43	42.10 253	11.724 251	25.37 210	53.280 228	49.76
	20	40.388	02.81	7.00	44.63	II.975	27.47 216	53.508 205	49-59 31
	30	40.578	04.50	0.00	17 52	12.189	29.93 271	53.713 180	49.28
Mai	10	40.737 128	00.59 216	0.24	50.00 220	12.362	32.07	53.893	48.85
	20	40.865 94	68.75 223	8.38 4	53.98 333	12.492 84	35.58 298	54.046	48.34 57
	29*)	40.050	70.98 223	8.42 6		12.576 28	38.56	54.168 80	47.77
Juni	8	41 017	73.21 217	8.36	57.31 60.58 312	12.614	41.53 287	E4 257	47 T7
	18	41.040	75.38 205	8.20	1 03.70 _0_	12.605	44.40 268	54 212	16 57
	28	41.026	77.43	7.95 34	66.57 255	12,550	15 08	54.222	45.00
Juli	8	40.976 85	79.30 166	7.61 34	69.12 218	12.451 99	49.51 213	54.316 52	45.43 52
	-0					-4-	1	3-	,
	18	40.891 117	80.96	7.20	71.30	12.309 180	51.64 176	54.264 85	44.91 48
Ann	28	40.774 146	82.35 111	0.71	73.04 128	12.129 214	53.40	54.179 116	44.43 43
Aug.	7	40.628	83.46 80	1 011/ 58	74.32 78	11.915 240	54.77 94	54.063 142	44.00
	17	40.458 187	84.26	5.59 62	75.10 26	11.675 261	55.71 48	53.921 161	43.61 33
	27	40.271 198	84.73 14	4.97 62	75.36 26	11.414 272	56.19 3	53.760 173	43.28 28
Sept.	6	40.073 199	84.87	4.35 62	75.10 78	11.142 273	56.22	53.587 177	43.00 22
	16	39.874 102	84.66	3.73 6-	74.32	10.809	55.78	53.410 170	42.78
	26	39.682	84.10	3.12 56	73.02	10.604	54.87 137	53.240	42.64 6
Okt.	6	39.506 149	83.20	2.50	71.23 226	10.357 216	53.50 181	53.080 129	42.58
	16	39-357 115	81.95 158	2.05 43	68.97 268	10.141 177	51.69 222	52.957 94	42.62
	26	39.242	80.37 189	1.62	66.29 305	9.964 129	49.47 259	52.863 53	42.79 30
Nov.	5	39.168 74	78.48 216	1.2/ 25	03.24 225	9.835	46.88 291	52.810 6	43.09 47
	15	39.142 24	76.32 240	1.02	1 39.09 258	9.761 15	43.07	52.804 45	43-56 63
	25	39.166 76	73.92 258	0.88	50.31	9.740	40.50	52.049 05	44.19 70
Dez.	5	39.242	71.34 270	0.86 $\frac{2}{10}$	52.59 374	9.793 110	37.46 334	52.944 143	44.98 94
	15	39-369 173	68.64 272	0.96	48.85 365	9.903 169	34.04 340	53.087 187	45.92 108
	25	39.542 214	65.92 267	1.18	45.20	10.072	30.64 340	53.274 225	47.00 117
	35	39.756	63.25	1.51	45.20 41.76	10.294	30.64 328 27.36	53.499	48.17
Missel	Out				<u>'</u>	0.000			10.66
	l. Ort , tg δ	38.315	68.78	5.36	52.78	9.989	35.44	51.103	49.66
sec o		1.076 +2.6	+0.396 -5.0	2.778	+2.591 -7.8	1.358	+0.918	1.017	-0.184
b.			-7.9 0.03	-0.I	<b>−7.8</b>	+1.9	<b>-7.</b> 5 → 0.03	+3.3	<b>-7.4</b> <b>+0.03</b>
0.	0	-0.01	+0.92	-0.07	+0.92	-0.02	+0.93	0.00	+0.93

<sup>\*)</sup> Bei Stern 621) und 622) lies Mai 30.

_ Ta	1.0	626) η I	Herculis	625) α Tria	ng. austr.	627) Grb :	2377 Drac	628) ε S	Scorpii
	*5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	16 <sup>h</sup> 40 <sup>m</sup>	+39° 1′	16 <sup>h</sup> 42 <sup>m</sup>	-68° 54'	16 <sup>h</sup> 44 <sup>m</sup>	+56° 53′	16 <sup>h</sup> 46 <sup>m</sup>	-34°10′
Jan.	1	48.848 237	67.37 307	15.75 56	57.43 176	6.961	17.35 332	15.645 279	58.23
	II	49.085 277	64.30 279	16.31 64	55.67 139	7.230	14.03 299	15.924 312	EX TO
	21	49.302	61.51 241	16.95 70	1 54.28	7.571 385 7.056	11.04 254		58.16
	31	49.009	50.10	17.65 79	53.20	7.956	8.50 200	16.570 334	58.39 36
Febr.	10	49.998 340	57.17 139	18.39 74	52.72 15	8.378 422	6.50	16.919 355	58.75 49
	20	50.338 343	55.78 <sub>81</sub>	19.15	52.57 26	8.823	F TO	17.274	59.24
März	I	50.081 228	54.97 20	10.02	52.83 65		4.36 74	1 1/•UZU	39.01
	11	51.019 325	54.77	20.67 75	53.48 101	0.720 434	4.29 60	17.977 337	00.45
	21	51.344 306	55.18 98	21.41 70	54.49 135	TO T66	4.89	1 -0.1-4	01.14
	31	51.650 281	56.16	22.11 65	55.84 166	10.574 408	6.12 180	18.637 323	61.86 74
Apr.	10	51.931 251	57.67 196	22,76	57.50 192	10.945 327	7.92 220	18.940 282	62.60
	20	52.182	59.63	23.36 "	50.42	11.272	10.21	19.222 256	
	30	52.399 179	61.90 262	23.09 16	61.56	11.546 216	12.90	19.478 228	64.12 78
Mai	10	52.578 140	64.58	24.35 27	03.00 246	11.762	15.90	19.706	04.00
	20	52.718 97	67.38 290	24.72 29	66.34 254	11.917 91	19.09 328	19.901 159	65.69 79
	30	52.815	70.28	25.01 19	68.88 256	, 12.008 <sub>25</sub>	22.37 326	20.060	10.8
Juni	8	52.869	73.18 282	25.20	71.44 252	12.033 39	25.03	20.180 79	67.26 78
	18	52.878 26	76.00	25.29	73.96	11.994	28.80 297	20.259 35	68.0I
	28	52.842	78.05	25.28	76.37	11.891 163	31.77	20.294	68.73
Juli	8	52.762	81.08 214	25.16 21	78.62 201	11.728 220	34.47 236	20.285 54	69.39 57
	18	52.642	83.22 180	24.95 30	80.63	11.508 272	36.83 198	20.231 96	69.96
	28	52.483 193	85.02	24.05	82.34 136	11.236 315	38.81 154	20.135	70.43 34
Aug.	7	52.290	86.44 102	24.27	1 X 2 7 O		40.35 107	20.001	70.77
	17	52.069	87.46	23.02 10	84.65 95	10.570 351	41.42 59	19.835	70.96
	27	51.828 255	88.05 59	23.33 <sub>53</sub>	85.15 3	10.193 393	42.01 7	19.643 208	70.98 16
Sept.	6	51.573 258	88.19 32	22.80	85.18	9.800	42.08	19.435 214	70.82 70.48 34 51
	16	51.315	87.87 76		84.74	9.404 -00	41.64 06	19.221	70.48
	26	51.064	87.11	21.75 47	83.81	9.010 266	40.68	10.012	09.97
Okt.	6	50.828	85.89 165	21.28	82.44	0.050	39.22	10.021	09.32
	16	50.620	84.24 205	20.88 40	80.67	8.319 284	37.29 239	18.659 122	68.54 85
	26	50.449 126	82.19	20.56	78.56	8.035 225	34.90 278	18.537 75	67.69 89
Nov.	5	50.323	79.70 2-6	20.34	70.19	7.810	32.12	18.402	66.80 00
	15	50.249 17	77.00	20.25	73.00 261	7.053 83	20.99 341	18.443	65.92
	25	50.232 42	13.91 321	76.20	71.05	7.570 2		18.482	05.10
Dez.	5	50.274 100	70.76 332	20.44 28	68.48 244	$7.567 \frac{3}{79}$	22.00 350	18.580 98	64.39 57
	15	50.374 157	67.44 332	20.72 40	66.04 223	7.646	18.33 365	18.736 208	63.82
	25	50.531	04.12	21.12	63.81	7.803	14.68 350	18.944 252	63.42
	35	50.740	60.91	21.63	61.86	8.036	14.68 350	19.197	63.21
Mittl	. Ort	50.218	67.36	17.55	73.34	9.275	18.77	16.350	69.80
sec δ.	, tg δ	1.287	÷0.811	2.781	-2.594	1.831	+1.533	1.209	-0.679
a,	a'	-+2.I	-6.8	+6.3	-6.7	+r.r	-6.5	+3.9	-6.3
Ъ,	b'	-0.02	+0.94	÷0.06	+0.94	-0.03	+0.95	+0.01	+0.95

т	ag	629) 49	Herculis	630) ζ²	Scorpii	631) (	, Arae	633) ж (	phiuchi
	"S	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	16 <sup>h</sup> 49 <sup>m</sup>	+15° 4′	16 <sup>h</sup> 50 <sup>m</sup>	-42°15'	16 <sup>h</sup> 53 <sup>m</sup>	-55° 53'	16 <sup>h</sup> 54 <sup>m</sup>	+90 27
Jan.	1	19-942 218	28.57 233	20.511	25.10 <sub>58</sub>	37.621	37.14 130	48.747 215	65.76 208
	11	20.160	20.24 2.9	20.015	24.52 36	37.998	35.84 101	48.962	63.68 198
	21	20.409	24.06	21.155 367	24.16 13	38.424	34.83 69	49.206 267	61.70 179
	31	20.079	22.II ,6r	21.522 384	$24.03 \frac{13}{8}$	30,007 .00	34.14 38	49.473 <sub>281</sub>	59.91
Febr.	10	20.965 294	20.46	21.906 393	24.11 27	39.376 503	33.76 6	49.754 288	58.38 122
	20	21.259 294	19.17 87	22.299 394	24.38	39.879	33.70	50.042 291	57.16 87
März	1	21.555 200	18.30 43	22.093 388	24.83	40.387	33.94	50.333 287	56.29
	II	21.843	17.87	23.001	25.42	40.889 489	34.46 78	50.620	55.82 7
	21	22.124 267	17.88	23.458	20.15 84	41.378	35.24	50.898 366	55.75 31
	31	22.391 250	18.33 85	23.819 341	26.99 94	41.848 444	36.27 123	51.164 251	56.06 68
Apr.	10	22.641 229	19.18	24.160 316	27.93 102	42.292 411	37.50 143	51.415 231	56.74 100
	20	22.870 206	20.38	24.470	28.95 109	42.703	38.93 160	51.646	57.74 126
	30	23.070	21.07	24.765	30.04	43.070 220	40.53 174	51.856 185	59.00 148
Mai	10	23.256	23.00 180	25.022	31.19 120	1 43.400 281	42.27 182	52.041	60.48 167
	20	23.407 119	25.49 198	25.242 180	32.39 122	43.687 226	44.10	52.198 127	62.11 172
	30	23.526 85	27.47 200	25.422	33.61 <sub>123</sub>	543.913 166	46.01	52.325 94	63.83 174
Juni	8	23.611 50	29.47	<sup>1</sup> 25.558 <sub>89</sub>	34.84	344.079	47.95	52.419 59	05.57 172
	18	23.661 13	31.44 188	25.647 39	36.05 116	44.183 38	49.87 185	52.478 23	07.29 16
т 11	28	23.674 24	33.32	25.686 10	37.21 108	44.221 28	51.72	52.501 14	68.94 153
Juli	8	23.650 60	35.06 1/4	25.676 <sub>60</sub>	38.29 96	44.193 94	53.46	52.487 50	70.47 138
	18	23.590 94	36.62	25.616 <sub>107</sub>	39.25 81	44.099 156	55.03 135	52.437 84	71.85 120
	28	23.496	37.98	25.509	40.06	43.943	56.38 109	52.353 117	73.05 100
Aug.	7	23.370	39.09 85	25.358	40.68	43.732 260	57.47	52.236	74.05 70
	17	23.218	39.94 58	25.171 216	41.10 18	43.472 226	58.24	52.092 165	74.84 56
	27	23.046 187	40.52	24.955 <sub>235</sub>	41.28 8	43.176 320	58.67 6	51.927 180	75.40 31
Sept.	6	22.859 192	40.81	24.720 241	41.20	42.856	58.73 32	51.747 186	75.71 6
	16	1 22,007	40.81	24.479 226	40.86	44.540 222	58.41 70	51.561 184	75.77 19
01.	26	22.478	40.50 61	24.243 217	40.28 8r	42.204	57.71 105	51.377	75.58 46
Okt.	6	22.303	39.89 92	24.026 186	39·47 <sub>101</sub>	41.905 258	56.66	51.206	75.12 72
	16	22.151 122	38.97 122	23.840 142	38.46 116	41.647 203	55.29 163	51.056 119	74.40 98
	26	22.029 83	37.75 150	23.698	37.30 126	41.444 136	53.66 184	50.937 82	73-42 124
Nov.	5	21.940 38	36.25 178	23.608	36.04	41.308 58	51.82	50.855 38	72.18 148
	15	21.908 -	34.47	23.579	34.74 129	41.250	49.80	50.817	70.70 171
T)	25	21.918	32.40	23.014	33.45	41.275	47.86	50.827	08.99 180
Dez.	5	21.978 109	30.26 233	23.715 164	32.25 107	41.384 191	45.89 186	50.886	67.10 204
	15	22.087 154	27.93 241	23.879 223	31.18	41.575 269	44.03 168	50.993 152	65.06 212
	25	22.241	25.52	24.102	30.28 <sub>69</sub>	41.844 226	42.35 145	51.145 192	62.94 213
	35	22.436	23.12	24.376	29.59	42.180	40.90	51.337	60.81
Mittl		20.814	24.79	21.321	37.73	38.769	51.30	49.566	60.93
sec δ,			+0.269		-0.909	1.784	-1.477	1.014	+0.167
a,			-6.1		<b>−6.</b> o	+5.0	<b>−</b> 5·7	+2.9	-5.6
b,	b'	-0.01	+0.95	+0.02	<b>-</b> +0.95 ∣	+0.03	+o.96	0.00	+0.96

Ta	ເອ	634) ε F	ierculis	637) η Ор	hiuchi m	639) ζ I	raconis	640) x H	erculis $pr$
	***	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	16 <sup>h</sup> 57 <sup>m</sup>	+31° 0'	17 <sup>h</sup> 6 <sup>m</sup>	-15° 38′	17 <sup>h</sup> 8 <sup>m</sup>	+65°47′	17 <sup>h</sup> 11 <sup>m</sup>	+14°27'
Jan.	ĭ	58.341 212	51.26 290	55.332 226	59.51 76	33.10 27	18.80	53.680	31.43 228
	11	58.553 249	48.36 267	55.558 256	60.27 82	33.37 36	1 13.30 000	53.879 231	29.15 216
	21	58.802 278	45.69 236	55.814 279	61.09 82	33·73 <sub>44</sub>	12.21 274	54.110 256	26.99
	31	59.080 299	43.33	56.093	61.91 78	34.17 50	9.47 222	54.366 274	25.04 167
Febr.	10	59.379 312	41.38	56.387 302	62.69 71	34.67 <sub>55</sub>	7.25 164	54.640 286	23.37
	20	59.691 317	30.OT	56.689 306	63.40 61	35.22 <sub>57</sub>	r 61	54.926 290	22.04
März	1		28 26 95	56.995 303	64.01 48	35·79 <sub>58</sub>	4.63 30	55.216 290	21.12
	11	60 222 314	28 48 30	57.298 296	64.49 32	36.37 <sub>57</sub>	1 22	55.506 285	20.62 49
	21	60 628	28.76	57.594 <sub>286</sub>	64.81 18	36.94 <sub>55</sub>	4.70 103	55.791 274	$\frac{20.63}{20.58} = \frac{5}{20}$
	31	60.921 273	39.49 73	57.880 273	64.99 3	37·49 <sub>50</sub>	5.73 164	56.065 261	20.07
			1			1			/9
Apr.	10	61.194 249	40.72 167	58.153 256	65.02 10	37·99 <sub>45</sub>	7.37 217	56.326 244	21.76
	20	61.443	42.39 205	58.409 237	64.92 21	38.44 38	9.54 261	56.570 223	22.91
31.1	30	61.665	44.44 234	58.646 213	64.71 29	38.82 31	12.15 296	56.793 198	24.38 170
Mai	10	61.856	46.78 254	58.859 188	64.42 35	39.13 22	15.11 321	56.991 171	26.08 189
	20	62.013 120	49.32 266	59.047 <sub>158</sub>	04.07 37	39.35 14	18.32 334	57.162 141	27.97 199
	30	62.133 81	51.98 269	859.205 125	63.70 39	8 39.49 5	21.66 338	57.303 107	29.96 203
Juni	8*)	62.214 40	54.67 264	\$59.330 89	1 03.31 -0	39.54 4	1 25.04	57.410 71	31.99 202
	18	$62.254 \frac{1}{2}$	57.31 252	59.419 52	02.03	39.50	28.36 332	57.481 33	34.01 194
	28	62.252	59.83	59.471 12	02.50 22	39.37 21	31.52 292	57.514 4	35.95 181
Juli	8	62.209 83	62.17 210	59.483 27	62.25 30	39.16 29	34.44 262	57.510 43	37.76
	18	62.126	64.27	59.456 65	61.95	38.87 37	37.06 225	57.467	39.40
	28	62.005	66.08 148	59.391 101	61.69 24	1 28.50	39.31 183	57.388 79	40.84
Aug.	7	01.849	67.56	59.290	61.45 22	38.08 48	41.14	57.274 143	42.05 96
	17	01.004	68.68	59.158 157	61.23 21		42.51 88	57.131 167	43.01 69
	27	61.457 224	69.42 74	59.001	61.02 20	37.00 <sub>52</sub> 37.08 <sub>54</sub>	43.39 37	56.964 184	43.70
Sept.	6	61.233 230	69.76	58.827 184	60.82 18	36.54 56	12.76	56.780	44.10
1	16	01.003	60.60	58.643 182	60.64 17	35.98 <sub>55</sub>	43.61 69	56.586	44.22
	26	1 00.770	60.2T 40	58.461	60.47	35.43 55	42.92	56.393 183	44.04
Okt.	6	60.562	68 2T 90	58.290	60.33 10	34.89 49	41.72	56.210 165	12.55
	16	60.370 160	67.01 169	58.140 119	60.23 4	34.40 44	40.02 218	56.045 136	42.76
	26	60.210	65.32 206	58.021 80	60.10	33.96 38	37.84 262	55.909 100	41.67
Nov.	5	60 00T	63.26	EE 0.4T	60.24	33.58 29	35.22 300	55.809 57	40.30 165
	15	60.018 73	60.87 266	57.941 34 57.907 15	60.38 26	33.29 20	32.22 332	55.752 11	38.65 189
	25	50.007	58.21 287		60.64 39	33.09 10		FF 74T	36.76
Dez.	5	60.029 87	55·34 <sub>301</sub>	57.988	61.03 39	32.99	25.36 354	55.779 86	34.66
	15	60.776		_			27.60	FF 86-	
	25	60.255 185	52·33 <sub>3°6</sub> 49·27 <sub>3°1</sub>	58.103 <sub>161</sub> 58.264 <sub>203</sub>	61.55 64 62.19 74	32.99 <sub>11</sub> 33.10 <sub>21</sub>	17.99 359	55.005 133 55.998 175	32.42 30.09 <sub>235</sub>
	35	60.440	46.26	58.467	62.93	33.31	14.40	55.990 175	27.74
3500			1 -						'
	l. Ort	59.513	49.11	56.053	68.19	36.44	18.36	54.587	26.58
	$\delta$ , tg $\delta$	1.167	-+0.601	1.039	-0.280 -4.6	2.438	+2.224	1.033	-+0.258
a	a'	+2.3	-5.4	+3.4	-4.0	+0.2	-4.5	+2.7	-4.2

<sup>\*)</sup> Bei Stern 640) lies Juni 9.

Ta		641) 8 H	Ierculis	643) π H	erculis	644) & 0	phiuchi	645) ß	Arae
10	rg.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	17 <sup>h</sup> 12 <sup>m</sup>	+24° 54'	17 <sup>h</sup> 12 <sup>m</sup>	+36° 52′	17 <sup>h</sup> 18 <sup>m</sup>	-24° 56′	17 <sup>h</sup> 20 <sup>m</sup>	-55° 28′
Jan.	r	32.847 197	34.99 271	55.975 200	35.19 308	18.532 230	19.24 18	17.048 17.082 335	18.80
	II	33.044 232	32.28 253	56.175 242	32.11	18.702	19.42 28	17.505	T7 20 151
	21	33.270 261	29.75 227	56.417 276	29.24	19.026 288	TO ~O	17.773 433	16.02
	31	33·537 <sub>281</sub>	27.48 191	56.693 302	26.70 211	19.314	20.05	10.200	15.03
Febr.	10	33.818 295	25.57 149	56.995 <sub>320</sub>	24.59 162	19.621 317	20.45 40	18.671 485	14.32 71
	20	34.113 302	24.08 101	57.315 329	22.97 106	10.028	20.86	19.156	13.91 13
März	I	34.415 202	23.07 49	57.644 221	21.91 46	20.200	21.26 36	19.653 499	13.78
	II	34.717 207	22.58	57.975 225	21.45 -	20.502	21.62	20.152	13.93
	21	35.014 286	22.61	58.300	21.58	20.099	21.94	20.045	14.34 65
	31	35.300 271	23.16 102	50.013 295	22.29 126	21.207 295	22.21 21	21.125 460	14.99 89
Apr.	10	35.571 252	24.18	58.908 272	23.55 174	21.502 280	22.42	21.585 434	15.88
	20	35.823 228	25.63 181	59.180 244	25.29 215	21.782 261	22.59 13	22.019 402	16.99
** .	30	36.051 201	27.44 211	59.424 210	27.44 248	22.043 238	22.72	22.421 363	18.29 148
Mai	10	36.252	29.55 231	59.634 175	29.92 272	22.281	22.83	22.784 318	19.77 162
	20	36.423 137	31.86 243	59.809 135	32.64 286	22.492 180	22.94	23.102 266	21.30 174
	30	36.560	34.29 249	59.944 92	35.50 291	22.672	23.06	23.368 208	23.13 181
Juni	9	36.660 62	36.78	60.036	38.41 280	22.817 107	23.19	23.576	24.94 .86
	18	36.722	39.25	60.084 3	41.30	22.924 67	23.33	23.723 <sub>81</sub>	26.80
	28	36.744 19	41.62	60.087 42	44.07 250	22.991 25	23.49 ,8	23.804 13	28.64 178
Juli	8	36.725 <sub>58</sub>	43.83 201	60.045 87	46.66 234	23.016 19	23.67	23.817 55	30.42 167
	18	36.667	45.84 175	59.958 129	49.00 204	22.997 61	23.84 16	23.762	32.09 149
	28	36.570	47.59	59.829 166	51.04	22.036	24.00 13	23.642 181	33.58 128
Aug.	7	36.438 162	49.06	59.663	52.74 132	22.837	24.13 8	23.461 235	34.86
	17	36.276	50.21 81	59.464 226	54.06 91	22.703 162	24.21 2	23.226 278	35.86 69
	27	36.089 204	51.02 45	59.238 244	54.97 49	22.540 183	24.23 6	22.948 310	36.55 35
Sept.	6	35.885 214	51.47 8	58.994 253	55.46	22.357 195	24.17	22.638 326	36.90
	16	35.671	51.55 30	I 58.74T	55.51 41	22.162	24.03 ar	22.312	36.87 40
	26	35.457	51.25 68	50.400 212	55.10 86	21.907 186	23.82	21.984 312	36.47 77
Okt.	6	35.254 184	50.57 105	50.245 221	54.24 129	21.781	23.53	21.672	35.70
	16	35.070 155	49.52 141	58.024 190	52.95 172	21.616	23.19 37	21.393 232	34.59 141
T) T	26	34.915 118	48.11	57.834 150	51.23 212	21.483 93	22.82	21.161 170	33.18 166
Nov.	J	34.797 74	40.35 208	57.084	49.11 247	21.390 46	22.45 35	20.991	31.52 184
	15	34.723 26	44.27 226	57.581 50	46.64 278	21.344 6	22.10	20.093 10	29.68
Dez.	25 5	34.697 <sub>25</sub> <sub>34.722 <sub>77</sub></sub>	41.91 <sub>258</sub> 39.33 <sub>273</sub>	57.531 6	43.86 302 40.84 317	21.350	21.82 <sub>20</sub> 21.62 <sub>10</sub>	20.874 64 20.938 146	27.74 <sub>196</sub> 25.78 <sub>192</sub>
	_	//		1 3	1				
	15 25	34.799 126	36.60 <sub>281</sub>	57.600 118 57.718 170	37.67 324	21.520 161	21.52	21.084 21.308 294	23.86 <sub>180</sub> 22.06 <sub>162</sub>
	35	34.925 <sub>170</sub> 35.095	33·79 <sub>279</sub> 31.00	57.888	34·43 <sub>319</sub> 31.24	21.681 205	21.54 21.68	21.500 294	20.44
Mitt	tl. Ort			-		-		TQ 285	'
	$\delta$ , tg $\delta$	33.912	31.28	57.322	32.60	19.309	29.03	18.375	31.70
	a'	+2.5	+0.464 -4.1	1.250 +2.1	+0.750	1.103	-0.465 $-3.6$	1.764 +5.0	-1.454 -2.5
	b'	-0.01	-4.1 +0.98	-0.0I	4.1 -+0.98	+3.7 +0.01	<i>−</i> 3.0 +0.98	+0.02	−3.5 +-0.99

		648) 8	Arae	651) α	Arae	653) В	Draconis	652) λ	Scorpii
	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	940	17 <sup>h</sup> 25 <sup>m</sup>	-60°37′	17 <sup>h</sup> 27 <sup>m</sup>	-49°49′	17 <sup>h</sup> 29 <sup>m</sup>	+52°20′	17 <sup>h</sup> 29 <sup>m</sup>	-37° 3′
Jan.	I	38.95 37	57.18 181	10.786	38.63 127	2.454 193	45.26	30.944 246	32.16
	11	39.32 44	55.37	080.11	37.36 106	2.047	41.83 343	31.190 285	31.57 44
	21	39.76 44	53.83	11.422 381	36.30 84	2.901	30.04 28	31.475 315	31.13 29
	31	40,24	52.58 94	11.803 409	35.46	3.206 347	35.80 239		30.84
Febr.	10	40.76 52	51.64 62	12.212 429	34.87 36	3.553 378	33.41 185	31.790 337 32.127 353	30.69
	20	41.31	51.02 29	12.641	34.51	3.931 <sub>399</sub>	31.56 124	32.480 360	30.66
März	I	41.00	50.73	13.000	34.38 =	4.330	30.32 59	32.040 363	30.74 18
	11	42.45 56	50.76	13.522 428	34.48	4.739	29.73 6	33.203	30.92 26
	21	43.01	51.11 63	13.000 428	34.79 51	5.140 205	29.79 72	33.502	31.18 33
	31	43.56 54	51.74 92	14.388 413	35.30 69	5.541 374	30.51 133	33.914 340	31.51 40
Apr.	10	44.10 50	52.66	14.801 391	35.99 88	5.915	31.84 188	34.254 323	31.91 47 32.38 51
	20	44.60	53.83	15.192	36.87 103	0.200	33.72	34.577	32.38 54
	30	45.00	55.24 - 6-	15.557	37.90 118	1 0.501 262	30.07	34.881 278	32.92 61
Mai	IO	45.48	56.86	15.009	39.08 132	0.830	38.80	35.159 248	33.53 6-
	20	45.84 31	58.00	16.183 250	40.40	7.044 160	41.01 320	35.407 213	34.20 73
	30	46.15 24	60.60	16.433 200	41.82 150	7.204 103	45.01 329	35.620 174	34.93 79
Juni	9	46.39 17	02.04	10.033	43.32	7.307 43	40.30 328	35.794 131	35.72 8.
	18	40.50	04.73	16.779 89	44.80	7.350 17	31.30 217	35.925 85	30.55 85
	28	46.65	00.82	16.868	46.41	7.333	54.75 300	36.010 36	37.40 81
Juli	8	46.66 6	68.85	$16.897 \frac{32}{32}$	47.93 143	7.256 135	57.75 273	36.046	38.24 81
	18	46.60	70.77	16.865 91	49.36	7.121 188	60.48	36.032 62	39.05 74
	28	46.46	72.50 149	1 10,774	50.66	6.933 238	62.90 204	35.970 107	39.79
Aug.	7	46.25 28	73.99 119	10.028	51.78 90	6.695 -0.	04.94 1	35.863 149	40.43
	17	45.97 22	75.18 86	10.433	52.68 <sub>64</sub>	6.415	66.56	35.714 183	40.95 2=
	27	45.65 36	76.04 47	16.198 265	53.32 34	340	67.73 69	35.531 207	41.30 18
Sept.	6	45.29 38	76.51	15.933 283	53.66 2	5.760	68.42	35.324 223	41.48
	16	44.0T	$76.56 \frac{1}{36}$	15.650	53.68 = 30	5.400	68.61	35.101 226	41.46
	26	44.52 39	76.20 77	15.365	53.38 62	5.050 247	68.20	34.875	41.23 42
Okt.	6	44.15 37	75.43 116	15.092	52.76	4.703 226	67.46	34.658	40.81 60
	16	43.82 29	74.27 151	14.845 205	51.83 118	4·377 <sub>291</sub>	66.12 181	34.463 162	40.21 75
	26	43.53 21	72.76 180	14.640	50.65 140	4.086 246	64.31 227	34.301 118	39.46 87
Nov.	5	43.32	70.96	14.488	49.25 , 6	3.840	02.04	34.183 66	38.59
	15	43.19	08.94	14.399 10	47.69 164	3.650 198	59·35 <sub>3°3</sub>	34.117	37.65 07
	25	43.15	00.// 222	14.300	40.05 767	3.522 60	30.3- 330	34.108	37.65 97 36.68 97
Dez.	5	43.20 15	64.55 219	14.433	44.38 162	3.462 =	53.02 349	34.158 109	35-74 88
	15	43.35 23	62.36 209	14.559 195	42.76	3·474 <sub>83</sub>	49.53 357	34.267 166	34.86
	25	43.58 23	60.27	14.754 257	41.25	3.557 153	45.90 353	34.433 216	34.09 65
	35	43.90 32	58.36	15.011	39.88	3.710	42.43	34.649	33.44
Mittl		40.58	70.22	11.961	50.72	4.473	42.40	31.869	42.97
sec δ,		2.039	-1.777		-1.185	٠.	+1.296		-0.755
a,		+5-4	-3.0		-2.9		-2.7		-2.7
Ъ,	b'	0.02	+o.99	+o.or	+0.99	-0.01	+0.99	+0.01	+0.99

T:	ag	656) a (	Phiuchi	654) ਐ	Scorpii	658) ξ S	erpentis	664) ω I	Oraconis
	- a-	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	17 <sup>h</sup> 32 <sup>m</sup>	+12° 36′	17 <sup>h</sup> 32 <sup>m</sup>	-42° 57'	17 <sup>h</sup> 34 <sup>m</sup>	-15° 21'	17 <sup>h</sup> 37 <sup>m</sup>	+68° 46′
Jan.	I	7.940 181	14.12 218	59.214 259	30.56	8.127 201	36.39 <sub>66</sub>	14.03 22	72.34 352
	11	8.121 215	11.94 208	50.473	20.62		37.05 70	14.25 33	68.82 352
	21	8.336 241	9.86	30.770	28.85 77	8.562 <sub>260</sub>	37.75 69	14.58 33	65.53 329
	31	8.577 263	7.96 164	60.112 362	28.25	1 ××22	38.44 66	I TE.OO	62.59 248
Febr.	10	8.840 276	6.32	60.474 380	27.84 24	9.101 291	39.10	15.51 57	60.11
	20	9.116 285	5.00	60.854	27.60 6	9.392 299	39.67 47	16.08 62	58.18
März	I	9.40I	4.05	1 01.242	27.54 8	9.691 300	40.14 33	16.70 64	56.86 65
	II	9.688 286	3.51 11		27.62	9.991 299	40.47 18	17.34 65	F6 OT
	21	9.974 279	2.40		27 84	10.200	40.65 3	17.99 63	56.24 3
	31	10.253 269	3.71 71	62.409 370	28.20 49	10.583 283	40.68 3	18.62 60	56.94 133
Apr.	10	10.522	4.42	62,770	28.69 61	10.866	40.56		58.27 190
_	20	10.776 237	5.49	63.131 331	20.30	11.137 255	40.31 34	19.22 19.76 <sub>48</sub>	60.17 240
	30	11.013	6.86	0.3.402	20.02	1 11.302	39.97 43	20.24	02.5/ 202
Mai	10	II.228	8.49 182	63.765	20.87	11.020	39.54 47	20.64 31	05.37
	20	11.417 159	10.31 193	64.036 234	31.81 94	11.836 182	39.07 49	20.95 21	68.47 331
	30	11.576	12.24 198	64.270	32.83 111	12.018	38.58 49	21.16	71.78 341
Juni	9	11.703 92	14.22	64.460 143	33.94	12.168	35.09	21.27 I	75.19 341
	18	11.705	16.20	64.603	35.09	12.283 76	37.02	2T 28	70.00
	28	11.849 54	10.11	64.695 39	36.26 116	12.359 36	3/.20	21.19 19	81.92
Juli	8	11.864 = 24	19.91 165	64.734	37.42 112	12.395	36.83 37	21.00 29	85.06 289
	18	11.840 63	21.56	64.719 68	38.54 102	12.390 46	36.51 27	20.71	87.95 256
	28	11.777	23.02	64.651 118	39.56 89	12.344	36.24 22	1 20.22	90.51 -18
Aug.	7	11.677	24.26	64.533 162	10.15	12.260	36.02	19.88	92.69 176
	17	1 11.540 0	25.27	64.371	41.18 73	12.142	35.83	19:10 0	94.45 129
	27	11.388	26.02 75	64.171 228	41.70 29	11.994 170	35.68	18.78 62	95.74 79
Sept.	6	11.210	26.50 21	63.943	41.99 4	11.824	35.56	18.16 63	96.53 28
	16	11.010	26.71	63.698	42.03 =	11.641 186	35.45	17.53	96.81 -25
	26	10.826	26.63	03.449	41.81 48	11.455	35.36 6	16.88	96.56 78
Okt.	6	1 10.030	26.27 66	03.210	41.33 72	11.275 ,62	35.30 3	16.25 67	95.78 130
	16	10.468	25.61 94	62.993 182	40.61 93	11.112	35.27	15.64 55	94.48 180
	26	10.323	24.67 122	62.811	39.68	10.976	35.28 8	15.09 49	92.68 228
Nov.	5	10.211	23.45	02.070	38.59	10.876		14.60	90.40 270
	15	10.139 27	21.90	62.597 18	37.37 128	10.876 10.818 10.807	35.53 25	14.19	87.70
	25	10.112	20.23 TO1	62.579	30.09 128	10.807 39	35.78 36	13.00	04.0.3
Dez.	5	10.133 68	18.29 209	62.625	34.81 124	10.846 88	36.14 47	13.68 9	81.26 337
	15	10.201	16.20	62.736	33.57	10.934	36.61	13.59	77.70 365
	25	10.315	14.00	02.907	32.43 101	11.068	37.18 65	13.62	74.05 362
	35	10.472	11.78	63.134	31.42	11.245	37.83	13.77	70.43
Mittl	. Ort	8.853	8.27	60.251	41.80	8.920	44.97	17.88	69.16
sec δ.		1.025	+0.223	1.367	0.931	1.037	-0.275	2.764	+2.576
a.	a'	+2.8	-2.4		-2.4	-3.4	-2.3	-0.4	-2.0
b,	b'	0.00	+0.99		±0.99	0.00	0.99	-0.02	+1.00

		663) ı I	Herculis	661) η I	Pavonis	665) β С	phiuchi	670) ψ Dr	aconis pr
Ta	ıg	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	17 <sup>h</sup> 37 <sup>m</sup>	+46° 2′	17 <sup>h</sup> 39 <sup>m</sup>	-64°41'	17 <sup>h</sup> 40 <sup>m</sup>	+4° 35′	17 <sup>h</sup> 42 <sup>m</sup>	+72° 10′
Jan.	I	44.451 <sub>176</sub>	18.40	48.34 38	39.63 211	29.551 178	33.84 175	55·35 <sub>22</sub>	47.53
0 00111	II	44.627 227	15.07 333	48.72 46	37.52 186	29.729 210	32.09 169	55·57 <sub>35</sub>	47.53 353 44.00 331
	21	44.854 273	11.95 282		35.66	29.939 237	30.40	55.92 47	40.69 331
	31	45.127 310	9.13 239	10.50	34.09 125	30.176 257	28.83	56.39 47	37.71 254
Febr.	10	45.437 338	6.74 188	50.28 61	32.84 91	30.433 272	27.46	56.96 66	35.17 <sub>200</sub>
	20	45.775 2-6	4.86	50.89 62	31.93 57	30.705 281	26.35 82	57.62 71	33.17 139
März	Ι	40.131	3.55 68	51.52 65	31.36 22	30.986 <sub>281</sub>	25.53 48	58.33	31.78 73
	II	1 40.497	2.87	52.17	31.14 =	31.270 282	25.05 12	59.07 76	31.05
	21	40.804	2.83	52.81 <sub>61</sub>	31.27 45	31.553 270	24.93 =	59.83	31.00 61
	31	47.223 343	3.42	53·45 <sub>61</sub>	31.72 78	31.832 270	25.15 56	60.57 <sub>70</sub>	31.61 125
Apr.	10	47.566	4.61	54.06 <sub>58</sub>	32.50 108	32.102 258	25.71 86	61.27 <sub>64</sub>	32.86 182
	20	4/.005 280	0.34	54.04	33.58 136	32.360 242	26.57	61.91 56	34.68 233
35.3	30	48.174	8.54 259	55.19 6	34.94 161	32.602 222	27.69 132	UZ.4/	37.01 274
Mai	10	1 48.428	11.13	55.69 43	36.55 183	32.824 198	29.01	02.94	39.75
	20	48.640 167	14.02 308	56.12 37	38.38 201	33.022	30.49 158	03.31 25	42.80 327
	30	48.807 117	17.10	56.49 <sub>30</sub>	40.39 215	33.193 139	32.07 161	63.56	46.07 338
Juni	9	48.924 65	20.27	56.79 2τ	42.54	33.332 105	33.68 161	03.00	49.45
	18	48.989 12	23.40 310	57.00	44.77 226	33.437 68	35.29	63.69	52.84 232
	28	49.001	20.50 205	57.12 4	47.03	33.505 29	36.84	03.58	50.10
Juli	8	48.960 94	29.51 271	57.16 6	49.26 213	33·534 <sub>10</sub>	38.30 133	63.35 35	59.30 290
	18	48.866	32.22 241	57.10	51.39 196	33.524 49	39.63	63.00	62.20 260
	28	1 48.723	34.03 207	50.95	53.35	33.475 86	40.82	02.55	64.80
Aug.	7	48.533	36.70 167	56.72 30	55.08	33.389	41.83 82	02.01	67.02 180
	17	48.303 262	38.37	50.42	50.51	33.269	42.65 63	61.39 60	68.82
	27	48.040 287	39.61 78	56.05 37	57.60 68	33.122 168	43.28	60.70 74	70.16 85
Sept.	6	47.753 303	40.39 31	55.64 44	58.28 25	32.954 182	43.71	59.96 <sub>76</sub>	71.01 34
	16	47.450	40.70 18	55.20	58.53	32.772 187	43.92 21	59.20	71.35 18
	26	1 4/145	40.52 68	54.75	58.34 65	32.585 181	43.92	50.43 77	71.17
Okt.	6	40.842	39.84	54.31	57.69 109	32.404 167	43.71	57.00 72	70.46
	16	46.560	38.67 164	53.91 35	56.60 148	32.237 142	43.27 44 66	50.94 68	69.23 174
27	26	46.307	37.03 208	53.56 28	55.12 182	32.095	42.61	56.26 61	67.49 222
Nov.	5	1 40.094	34.95	53.28 _0	53-30 210	31.985	1 41.73	55.65 51	65.27 265
	15	45.930	32.40	53.10	51.20	31.915 27	40.63	33.14 40	62.62
**	25	45.021 48	29.01	53.01	48.91	31.000	39-33 130	54.74 28	59.00 223
Dez.	5	45.773 15	26.47 333	53.03 12	46.52 241	31.908 67	37.84 149	54.46 14	56.27 354
	15	45.788 78	23.14 3+3	53.15 23	44.11	31.975 112	36.21	54-32 0	52.73 363
	25	45.866	19.71	53·38 33 53·71	41.76	32.087	34.48 173	54.32 13	49.10 363
	35	46.005	16.28 343	53.71	39.56	32.240	32.70 178	54.45	45.47
	l. Ort	46.137	14.55	50.38	52.12	30.407	27.04	59.98	43.81
	$\delta$ , tg $\delta$	1.441	+1.037	2.340	-2.115	1.003	+0.080	3.267	+3.111
	a'	+1.7	-1.9	+5.9	—ı.8	+3.0	-1.7	-1.1	-1.5
Ъ,	b'	10.0	+1.00	0.01	+1.00	0.00	+1.00	-0.02	+1.00

	0.00	667) µ H	Herculis <sup>1</sup> )	675) 35 1	Draconis	671) <b>ξ</b> ]	Draconis	672) & I	Herculis
	ag 	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	17 <sup>h</sup> 44 <sup>m</sup>	+27° 45'	17 <sup>h</sup> 51 <sup>m</sup>	+76° 58′	17 <sup>h</sup> 52 <sup>m</sup>	+56° 52'	17 <sup>h</sup> 54 <sup>m</sup>	+37°15′
Jan.	I	5.358 166	21.94 282	61.40	24.33 349	27.035 161	58.12 351	10.249	32.01
	II	5.524 205	19.12	61.62 40	20.04 220	27.196	1 24.01 222	10.401	28.89 297
	21	5.729 228	10.45	62.02 58	17.54 200	27.428	151.29 202	10.0000	25.92 270
	31	5.967 261	14.02	62.60 71	14.55 258	27.723 2.0	40.27 260	1 10.030	23.22
Febr.	10	6.231 284	11.93 168	63.31 84	11.97 205	28.071 392	45.67 208	11.109 296	20.88 189
	20	6.515 296	10.25	64.15 93	9.92	28.463 423	43.59 149	11.405 315	18.99
März	I	6.811	9.06	65.08	8.45 82	20.000	42.10	11.720	17.02
	II	7.114 204	8.39 13	66.06	7.63 16	1 29.327	41.25 19	12.045 228	16.83 10
	21	1.410 208	8.26	67.07	7.47 51	29.775	41.06	12.3/3 325	16.64 41
	31	7.716 288	8.67 93	68.06 94	7.98 114	30.210 426	41.55	12.698 316	17.05 97
Apr.	10	8.004 273	9.60	69.00 87	9.12	30.644 <sub>398</sub>	42.67 170	13.014 300	18.02
	20	8.277	10.99	69.87 76	10.84 223	31.042	44.37	13.314 278	19.52 196
	30	8.529 228	12.78	70.63 64	13.07 266	31.403	46.58	13.592	21.48
Mai	10	8.757 700	14.91	71.27 50	15.73 200	31./10 262	49.23	13.842	23.82
	20	8.956 165	17.29 255	71.77 34	18.72 322	31.980 203	52.20 322	14.059 180	26.46 285
	30	9.121	19.84 263	72.11	21.94 335	32.183 139	55.42	14.239	29.31 297
Juni	9	9.250 89	22.47 265	72.28 r	25.29 339 28.68 339	32.322 73	50.// 338	14.378 95	32.28 300
	18*)	9.339	25.12 208	72.29 16	20.00	32-395 4	1 02.15	14.473 47	35.28
	28	9.386 4	27.70	72.13 32	32.00	32.399 65	05.48	14.520	38.23 282
Juli	8	9.390 38	30.15 225	71.81 47	35.18 295	32.334 131	00.07 297	14.520 48	41.05 263
	18	9.352 81	32.40 201	71.34 <sub>62</sub>	38.13 267	32.203 194	71.64 267	14.472	43.68
	28	9.271 120	34.41	70.72	40.80 231	32.009 252	74.31 233	14.377	46.05 205
Aug.	7	9.151	36.14 141	69.98 85	43.11	31.757 303	76.64 193	14.239	48.10
	17	8.996	37.55 106	69.13	45.01	31.454 346	70.57 748	14.062	49.81
~ .	27	8.811 206	38.61 69	68.18 101	46.48 99	31.108 379	80.05 100	13.852 236	51.14 90
Sept.	6	8.605 221	39.30	67.17 105	47·47 <sub>48</sub>	30.729 <sub>400</sub>	81.05 51	13.616	52.04 47
	16	8.384 226	39.60 =	00.12	47.95 2	30.329 408	81.56	13.364 260	52.51 3
01.4	26	8.158 221	39.50	65.05	47·93 <sub>56</sub>	29.921 404	81.55	13.104 256	52.54 44
Okt.	6	7.937 206	39.01 80	63.99 103	47.37 107	29.517 -0-	81.01	12.848	52.10 89
	16	7.731 181	38.12	62.96 <sub>96</sub>	46.30	29.130 355	79.96	12.005 219	51.21 134
~~	26	7.550 148	36.83 166	62.00 87	44.73 206	28.775 312	78.39 205	12.386 185	49.87 176
Nov.	5	7.402	35.17 200	61.13	42.67	20.404	70.34 250	12.201	48.11
	15	7-295 <sub>60</sub>	33.17	60.38 61	40.10 280	28.207	73.84 288	12.050 95	45.95 252
70	25	7.235 II	30.85	59·77 <sub>45</sub>	37.27 320	20.010	70.96	11.963 42	43.43 <sub>281</sub>
Dez.	5	7.224 40	28.28 276	59.32 27	34.07 343	27.896 42	67.75 344	11.921 13	40.62 303
	15	7.264 90	25.52 287	59.05	30.64 356	27.854 36	64.31 357	11.934 68	37·59 <sub>316</sub>
	25	7.354 138	22.65 288	58.96 11	27.08 357	27.890	60.74 359	12.002	34.43 318
	35	7.492	19.77	59.07	23.51	28.004	57.15	12.123	31.25
Mittl		6.498	16.76	67.84	19.69	29.346	53.35	11.613	26.57
sec δ,		1.130	+o.526	4.436	+4.322		+1.533	1.256	<b>⊹0.</b> 761
a,		+2.4	-r.4	-2.7	-o.7	-+1.0	-0.7	+2.1	-o. <sub>5</sub>
<i>b</i> ,	b'	0.00	+1.00	-0.01	+1.00	0.00	+1.00	0.00	+1.00
	1) Die	jährliche Paralla	axe (o":::1) is	t bereits berücks	ichtigt.			I 40	)

<sup>1)</sup> Die jährliche Parallaxe (0"111) ist bereits berücksichtigt. \*) Bei Stern 675), 671) und 672) lies Juni 19.

Ta		676) y I	Oraconis	673) v Oj	phiuchi	677) 67	Ophiuchi	679) y S	agittarii
10	8	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	17 <sup>h</sup> 55 <sup>m</sup>	+51° 29'	17 <sup>h</sup> 55 <sup>m</sup>	-9° 45′	17 <sup>h</sup> 57 <sup>m</sup>	+2° 55′	18 <sup>h</sup> 1 <sup>m</sup>	-30° 25′
Jan.	I	10.711	47-94 345	42.475 175	56.43	37.431 163	65.79 163	56.190	26.69 37
	II	10.864	44.49 345	42.650 200	E7 24 9	37.594 196	04.10		
	21	11.078 269	41.22 298	42.859 237	1 58 OF	37.790 225	62.58	E6 627 233	26.03 29
	31	11.347 315	38.24 257	43.096 258	TO TT	38.015 247	61.11	E6 888 207	0=0-
Febr.	10	11.662 351	35.67 207	43.354 273	59.89 66	38.262 264	59.82 105	57.180 292	25.66
						1		311	
3.5"	20	12.013 378	33.60	43.627 284	60.55 48	38.526	58.77 58.00 77	57.491 323	25.55 8
März	1	12.391 395	32.10 87	43.911 290	61.03 29	38.800 282	40	57.814 331	25.47 6
	II	12.700 400	31.23 21	44.201 291	61.32 8	39.082 283	57.54 12	58.145 333	25.41
	21	13.186 397	31.02 44	44.492 289	61.40	39.365 281	57.42	58.478 332	25.36 4
	31	13.583 397	31.46	44.781 283	61.28	39.646 275	57.63	58.810 327	25.32
Apr.	10	13.966 360	32.52 164	45.064 273	60.95	39.921 266	58.17 82	59.137 317	25.29
	20	14.326 330	34.16	45.337 261	60.45	40.187 252	58.99	59.454 302	25.29 2
	30	14.050	36.31	45.598 242	59.80 76	40.440	60.07	59.756 284	25.31 7
Mai	10	14.947 246	38.88	45.840	59.04 84	40.674	01.35	60.040	25.38
	20	15.193	41.79 314	46.061 194	58.20 88	40.887 186	62.78 153	60.299 231	25.51 20
	30	15.389 141		46.255 165	57.32 87		64.31 156	60.530 196	25.71 26
Juni	9	T F 700	44.93 327	1 46 420	E6 4E	41.073 155	65.87		25.97 34
0 4111	19	TE 612	ET E2 332	16 550	FF 60	4T 050	67.44	60.884	26.31 40
	28	TE 626	E4 70 3~/	16 642	54.80	1 AT. 425	68.95		
Juli	8	15.508	57.02	16 604 54	54.07	17 400 TJ	70.37	6T 067	27.17 48
o u.,		97	~93	40.094 12	54.07 64			01.00/ 21	
	18	15.501	60.85 264	46.706	53.43	41.486	71.67 115	61.088 26	27.65 50
	28	15.347 206	03.49	46.676	52.89 46	41.451 74	72.82	61.062	28.15 48
Aug.	7	15.141	65.79 tot	46.606	52.43 36	41.377	73.81 82	60.990	28.63
	17	14.888 292	67.70	46.501	52.07	41.268 138	74.63 62	60.876	29.07 27
	27	14.596 323	69.19 102	46.364 161	51.80	41.130 163	75.25 44	60.725 181	29.44 26
Sept.	6	14.273 342	70.21	46.203 177	51.61 <sub>10</sub>	40.967	75.69	60.544 200	29.70 16
•	16	1 1.5.9.51	70.74 53	46.026 184	ETET	40.788 186	75.02	60.344 209	29.86 2
	26	13.579 348	70.76	45.842 182	51.48	40.602 183	$75.93 \frac{4}{16}$	60.135 207	29.88 =
Okt.	6	1 13.431	70.28 40	45.660 168	51.52	40.419	75 ST	59.928	29.76 25
	16	12.899 332	69.28 100	45.492	51.65	40.248 149	75.45 <sub>58</sub>	59.735 168	29.51 36
	26		.,		51.88	- + 7	74 95		
Nov.		12.595 265	67.79 197	45.347 114	52.20 32	40.099	74.87 78	59.567 133	29.15 45
1107.	5	12.330 216	65.82 242	45.233 75		39.980 82	74.09 98	59.434 89	28.70 52
	15	12.114	63.40 280	45.158 31	52.63 54	39.898 39	73.11	59.345 39	28.18 55 27.63 55
Dez.	25	11.957 94	60.60	45.127 16	53.17 65	39.859 5	71.94 135	59.306	27.03 55
Dez.	5		57.48 336	45.143 63	53.82 76	39.864 52	70.59 150	59.320 67	27.08 52
	15	11.837 44	54.12	45.206 108	54.58 86	39. <b>91</b> 6	69.09 159	59.387 120	26.56 46
	25	11.881	50.63 349	45.314 151	55-44 <sub>91</sub>	40.013 138	67.50 165	59.507 168	26.10 39
	35	11.993	47.11	45.465	56.35	40.151	65.85	59.675	25.71
Mi++1	Ort	T2 654	42.84	42 20"	64.50	28 207	r8 40	77. T.20	25.06
sec δ		12.654	42.04 +1.257	43.305	64.50	38.295	58.49 +0.051	57.138 1.160	35.96 0.587
a,		+1.4	-0.4		-0.172 -0.4	+3.0	-0.051 -0.2		+0.2
b,		0.00	+1.00	+3.3	-0.4 +1.00	0.00	+1.00	+3.9 0.00	+1.00
v,		0.00	1.00	0.00	1.00	0.00	1.00	0.00	, 1.00

T	n.c.	680) 72	Ophiuchi	681) o I	Herculis	682) μ S	agittarii	688) η S	erpentis
	*5	AR.	Dekl.	AR.	Dekl.	AR.	Deki.	AR.	Dekl.
19	40	18h 4m	+9° 33′	18h 5m	+28°45′	18 <sup>h</sup> 10 <sup>m</sup>	-21° 4′	18h 18m	-2° 54'
Jan.	I	29.308 152	21.10 196	10.861	17.36 282	9.554	26.19 16	11.362	49.58 126
	II	29.400	19.14	11.003	14.54	9.728 211	20.35	11.509	50.84 123
	21	29.647	17.25	11.186	11.83 249	9.939	26.55	11.001	52.07 115
	31	29.864	15.50	11.405	9.34	10.179 265	20.77	II.902	53.22
Febr.	10	30.104 259	13.96	11.054 272	7.16	10.444 282	26.97 17	12.137 253	54.24 83
	20	30.363 272	12.71	11.926 289	5.38 131	10.726 296	27.14 10	12.390 268	55.07 61
März	1	30.635 280	11.79 55	12.215	4.07	TT 022	27.24 2	12.658	55.68
	II	30.915 282	11.24 15	1 12.515	3.28 25	11.320	27.27 6	12.935 282	56.03 35
	21	31.198	11.09 =	12.820	3.03	11.634 308	27.21	13.217 281	56.10 20
	31	31.480 277	11.34 63	13.124 298	3.33 83	11.942 304	27.00 23	13.501 281	55.90 47
Apr.	IO	31.757 268	11.97	13.422 286	4.16	12.246 296	26.83 31	13.782	55.43 72
	20	32.025	12.949	13.708 260	5.47 174	12.542	20.52	14.050 265	54.71 92
	30	32.280	14.22	13.977	7.21 211	12.827 267	26.17 35	14.321 249	53.79 109
Mai	10	32.518 215	15.75	14.224	9.32	13.094	25.00	14.570	52.70
	20	32.733 188	17.47 185	14.444 188	11.70 259	13.341 221	25.43 37 35	14.800 205	51.50 128
	30	32.921 158	19.32	14.632	14.29 271	13.562 190	25.08 30	15.005 177	50.22
Juni	9	33.079 123	21.23 192	14.784 112	17.00	13.752	24.78 25	15.182	48.91 128
	19	233.202 86	23.15 188	14.896 69	19.74	13.906 115	24.53 18	15.325 107	47.63 124
	28	33.288 46	25.030	14.965 26	22.45 260	14.021 72	24.35 10	15.432 <sub>67</sub>	46.39 114
Juli	8	33.334 5	26.81 164	14.991 19	25.05 242	14.093 28	24.25 4	15.499 26	45.25 103
	18	33.339 25	28.45 147	14.972 63	27.47 221	14.121 16	24.21	15.525 16	44.22
	28	22 204	29.92 128	14.909 106	29.68	14.105 60	24.22 6	15.509 56	43.31
Aug.	7	33.229 111	31.20 106	14.803	31.61 161	14.045 100	24.28	TE 452	42.54 62
	17	33.118	32.26 82	14.660	33.22 128	13.945	24.37	15.359 127	41.02
	27	32.977 166	33.08 59	14.484 201	34.50 91	13.810 162	24.46	15.232	41.45 47
Sept.	6	32.811 183	33.67	14.283 220	35.41	13.648 183	24.55 7	15.078 173	41.13 18
	16	32.628	24.00	14.063 228	35.93 12	13.465	24.62 7	14.905 184	10.05
	26	32.437 190	34.07 18	13.835 227	36.05 28	13.272	24.65	14.721 184	40.92 3
Okt.	6	32.247	22.80	13.608 216	35·77 <sub>70</sub>	13.080	24.64	14.537	41.04 26
	16	32.068 158	33.44 72	13.392	35.07	12.900 159	24.59 7	14.362 156	41.30 41
	26	31.910 129	32.72	13.198 165	33.96	12.741 127	24.52 8	14.206 129	41.71
Nov.	5	21 58T	31.75 <sub>122</sub>	13.033	32.47 185	12.614 0_	24.44 8	T4.077	12.28
	15	27 680	30.53 146	12.907 83	30.62	12.527 43	24.36 6	13.984 53	42.99 87
	25	27 628	29.07 166	12.824 34	28.43 247	12.484 $\frac{43}{6}$	24.30		43.86
Dez.	5	31.631 7	27.41 182	12.790	25.96 269	12.490 55	24.29 4	13.922 9	44.86 113
	15	31.670 85	25.59 194	12.805 66	23.27 283	12.545 103	24.33 10	13.958 80	45.99 121
	25	31.755 127	23.65	12.871	20.44 287	12.648	24.43 16	14.038 122	47.20 127
	35	31.882	21.66	12.984	17.57	12.795	24.59	14.160	48.47
Mittl.		30.218	14.00	12.018	10.96	10.441	34.75	12.221	57.39
sec δ,		1.014	+0.168	1.141	+0.549		-0.385	1.001	0.051
a,		+2.8	-+0.4		+0.5	,	+0.9	+3.r	+1.6
b,	b'	0.00	+1.00		+1.00	· ·	+1.00		+1.00
								T* 40	

Та	o	689) ε S	agittarii	690) 109	Herculis	695) χ D	raconis1)	691) a T	elescopii
Tag       AR.     Dekl.       1940     18h 20m -34°24′ 18       Jan. I     10.328 183 44.80 7° 7       11 10.511 225 44.10 63 7       21 10.736 261 43.47 56 7       31 10.997 289 42.91 48 7       Febr. 10 11.286 311 42.43 41 8       20 11.597 327 42.02 36 8       März I     11.024 41.66 8		AR.	Dekl.	AR.	Deki.	AR.	Dekl,		
19	40	18 <sup>h</sup> 20 <sup>m</sup>	-34°24'	18 <sup>h</sup> 21 <sup>m</sup>	+21°44′	18 <sup>h</sup> 22 <sup>m</sup>	+72°42′	18 <sup>h</sup> 22 <sup>m</sup>	-45° 59'
Jan.	т	10.228	11.80	7.346 129	35.60 252	3.74 10	22.06	30.158 205	63.35 140
		10.511	44.TO	7.475 168	33.08 252	3.84 25	33.96	30.363 256	61.95 130
		10.726	13.47	7.643 202	30.64 226	4.09 38	30.40 345 26.95 321	30.619 299	60.65 118
		10.007	12-01	7.845	1 28 28	4.47	23.74 285	30.918	50.47
Febr.		11.286	12.12	7.845 <sub>231</sub> 8.076 <sub>254</sub>	26.28	4.47 50 4.97 60	20.89 239	31.252	59.47 103
T COL.	10				100			31.252 334	58.44 87
340		11.597 327	42.02 36	8.330 271	24.72	5·57 <sub>67</sub>	18.50 184	31.614 382	57.57 72
Marz	I	11.022	41.66	1 8.001	23.48 78	6.24 74	10.00	31.990 397	56.85
	11		41.35	0.005 202	22.70 29	0.90	15.45 55	32.393 405	56.30 39
	21	12.609 347	41.10	9.177 202	22.41	1.13 77	14.90	32.798 408	55.91 21
	31	344	40.90 15	9.470 290	22.62 69	0.52 76	15.01 77	33.206 404	55.70 5
Apr.	10	13.300	40.75 8	9.760 283	23.31	9.28 72	15.78	33.610 396	55.65 13
	20	4 7.00 7 1	40.67 r	10.043	24.44	10.00	17.17		55.78 31
	30	13.963 308	40.66	10.313	25.90	10.65	19.12	34.006 382 34.388 361	56.09 48
Mai	10		40.74 18	10.565	27.05 215	11.22 .0	21.55 282	34-149 222	56.57 67
	20	14.556 257	40.92 29	10.794 201	30.00 233	11.70 48	24.37 312	35.081 299	57-24 83
	30	14.813 222	41.21	10.995 169	32.33 245	12.07 25	27.49 332	35.380 258	58.07 00
Juni	9	15.035 182	41.60 39	11.164	34.78 250	12.32	30.81 332	35.638 211	FO 06
	19	15.217 139	42.09 58	1 11.200	37.28 246	12.44	34.24 343	35.849 158	60.18
	28	13.350	42.67 65	127 <sub>11.380</sub> 93	39.74 238	17 12.44 <sub>13</sub>	37.67 343	20.007	61.41 130
Juli	8	15.446 40	43.32 71	11.439 7	42.12	12.31 26	41.02 335	36.109 42	62.71 133
	18	15.486		11.446				36.151 17	64.04 131
	28	TE 456	44.03 73 44.76 71	TT 400 3/	44·35 <sub>204</sub> 46·39 <sub>180</sub>	12.05 11.68 37	44.21 <sub>294</sub> 47.15 <sub>266</sub>	26 724	65.35 125
Aug.	7	15.415 106	45.47 66	TT.22T	48.19	11.21 47	49.81 228	26.058	66.60 114
	17	15.309 147	46.13 58	11.214	49.71	10.64 65	52.00 187	2= 220	07.74
	27	15.162 181	46.71 47	11.064 178	50.93	9.99 72	53.96	35.926 178 35.75° 218	68.71 76
Sept.	6			10.886	FT 82	1	55.37 92		69.47
Doper	16	14.981 <sub>204</sub> 14.777 <sub>218</sub>	47.18 32 47.50 16	10.688 208	F2 20	9.27 <sub>76</sub> 8.51 <sub>80</sub>	76.20	35.53 <sup>2</sup> 246 35.286 263	69.99 24
	26	14.559 220	47.66	10.480	52.60	7.71 79	56 7T	35.023 265	70 22
Okt.	6	14.339 220	47.64 20	10.270 201	52.45	6.92 78	56.50	34.758 254	70.17
	16	14.131 186	47.44 36	10.069 183	51.94 87	6.14 75	55.94 118	34-504 218	69.83 62
	26				0/				C
Nov.	26	13.945 152	47.08 51	9.886	51.07 123	5.39 69	54.76	34.276 189	69.21 88
Tiov.	5	13.793 110	46.57 63	9.729 121	49.84 156	4.70 60	53.06 219	34.087 140	68.33 110
	15 25	13.683 60	45.94 72	9.608 81	48.28 186	4.10 51	50.87 263	33.947 82 33.865 20	67.23 127
Dez.	-5 -5	+ 2 6 × 6 /	45.22 76 44.46 77	9.527 37 9.490	46.42 213 44.29 234	3.59 39 3.20 26	48.24 300 45.24 331	0	65.96 <sub>139</sub> 64.57 <sub>145</sub>
	-	40		10				43	
	15	13.664 102	43.69 75	9.500	41.95 248	2.94 13	41.93 351	33.890 108	63.12
	25	13.766	42.94 71	9.557 102	39.47 256	2.81 2	38.42 200	33.998 169	61.67 142
	35	13.919	42.23	9.659	36.91	2.83	34.83	34.167	60.25
	l. Ort	11.374	53.61	8.380	28.26	8.31	26.54	31.464	72.44
sec 8	, tg 8	1.212	-0.685	1.077	+0.399	3.364	+3.212	1.440	-1.036
	a'	+4.0	+1.8	+2.5	+1.8	-1.2	+1.9	+4.5	+2.0
Ъ,		0.00	+1.00	0.00	+1.00	+0.02	+1.00	-0.01	+1.00

<sup>1)</sup> Die jährliche Parallaxe (o.118) ist bereits berücksichtigt.

Ta	10	694) 39	Draconis	699) α I	Lyrae <sup>1</sup> )	698) ζ	Pavonis	703) 110	Herculis
1.	*5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	18h 22m	+58°45'	18 <sup>h</sup> 34 <sup>m</sup>	+38°43'	18h 35m	-71°28′	18h 43m	+20° 29
Jan.	1	59.575 107	63.13 353	52.998 106	44.10	58.75 32	49.71 274	3.685 107	23.59 24
	II	59.682 184	50.60 353	53.104	44.19 41.08 304	50.07	46.97 261	3.792 146	21.17 230
	21	59.866	59.60 353 56.18 342	53.258 198	38.04 283	59.07 44 59.51 55 60.06 63	44.36	3.938 182	18.81
	31	60.121 318	52.00	53.456	25.2T	60.06 55	41.05	3.930 <sub>182</sub>	16.50
Febr.		60.439 372	52.99 283 50.16 236	53.693 237	35.21 <sub>253</sub> 32.68 <sub>212</sub>	60.69 63	41.95 215	4.120	16.59 190
		372				71	39.80 184	4.331 237	10,
	20	60.811	47.80 181	53.963 296	30.56	61.40	37.96	4.568	12.93
März	1		45.99 119	54.259 315	28.92	U2.1/0-	30.45 116	4.820	11.00 8.
	II	61.671 445	44.80 54	54.5740	27.83 50	62.98 83	35.29 77	5.099	10.82
	21		44.26	54.902	27.33	63.81 84	34.52	5.383 201	10.45
	31	459	44.39 78	55.235 333	27.43 69	64.65 84	34.13	5.674 291	10.57
Apr.	10	63.059 439	45.17 140	55.567 323	28.12	65.49 83	34.13	5.965 288	11.16
	20	63.498 408	46.57 195	55.890 307	29.37 176	66.32	34.52	6.253 278	12.20 14
	30	63.906 366	48.52 243	50.197 286	31.13 219		35.29 112	6.531 264	13.64
Mai	10		50.95 283	56.483 257	33.32 255	67.85 69	36.41	6.795 244	15.43 20
	20	64.588 257	53.78 312	56.740 223	35.87 282	68.54 60	37.87	7.039 219	17.50 22
	20	6181-							
Juni	30	64.845 192	56.90	56.963 184	38.69 300	69.14 69.65 41	39.64 203	7.258 189	19.78 24
Ouni	9	65.037 123	60.22 343	57.147 <sub>139</sub> 57.286 <sub>92</sub>	41.69 310	70.06	41.67	7.447 153	22.19 24
	28*)	65.211	63.65 344	E7 278	44.79 310	70.06 30	43.91 240	7.600 114	24.66 24
Juli	8	6= T88 =3	67.09 335	57.420	47.89 304	70.36 18	46.31	3 7.714 72 7.786 72	27.12 230
		90	70.44 319	57.420 9	50.93 289	70.54 5	48.80 249		29.51 227
	18	65.092 166	73.63 295	57.411 59	53.82 267	70.59 8	51.31 244	7.815 16	31.78 208
	28	04.920	76.58 265	57·352 108	56.49	70.51	53.75	7.799 59	33.86 186
Aug.	7	04.005	79.23 228	57.244	58.90	70.32	56.06	7.740 08	35.72 16
	17	04,404	81.51	57.092	00.99	70.00 42	58.15	7.642	37-33 12
	27	64.062 383	83.38	56.901 223	62.71 132	70.00 42 69.58 50	59.94 143	7-507 166	38.65
Sept.	6	63.679	84.80	56.678 247	64.02	69.08 68.57	61.37	7.341 188	20.65
	16		85 74 94	56.431 262	64.02	68.51 <sup>57</sup>	102.27	7-153 202	10 22
	26	02.035	86 T6	56.169 265	65.27	67.90 62	62.90 53	6.951 207	10.68
Okt.	6	02.400	86.06	55.904 259	65.26	67.28	62.02	6.744 202	10.67
	16	61.975 400	85.42	55.645 243	64.88 48	66.67 57	62.43 49	6.542 188	40.31 7
	26	67	/				7 .		
Nov.	5	61.575 363	84.25 168	55.402	63.93	66.10 65.60	61.45	6.354 165	39.60 105
	15	61.212 313	82.57 216	55.187	62.53 183	65.60 40	59.99 188	6.189 133	38.55 139
	25	00.000	80.41 260	55.008 <sub>136</sub> <sub>54.872 <sub>8-</sub></sub>	60.70 223	65.20 29	58.11	0.050 06	37.16
Dez,	5	60.647 182 60.465 105	77.81 298 74.83 328	F4 585	58.47 <sub>258</sub> 55.89 <sub>285</sub>	64.91 17 64.74 2	55.89 <sub>250</sub>	5.960 5.907	35.46 196
	J	105		54.705 35		3	53.39 267		33.50 219
	15	60.360 25	71.55 348	54.750	53.04 304	64.71	50.72 276	5.898 35	31.31 235
	25	60.335 55	00.07 356	54.769	50.00 314 46.86	64.82	47.96 276	5.933 80	28.96
	35	60.390	64.51	54.841	46.86	65.06	45.20	6.013	26.52
Mittl	. Ort	61.957	E	F4 240	26.25	62.20	r8 60	1681	75.35
sec 8.			55.71	54·349 1.282	36.21 +0.802 ¹	62.20	58.60	4.684	15.37
a.		+0.9	+1.649 +2.0			3.149	-2.986	1.067	+0.374
Ъ,					+3.0	+7.0	+3.1	+2.6	+3.7
-		0.01	+0.99	+0.01	+0.99	0.03	+0.99	0.00	+0.98

<sup>1)</sup> Die jährliche Parallaxe (0"124) ist bereits berücksichtigt.
\*) Bei Stern 699), 698) und 703) lies Juni 29.

Ta	ıg	704) λ	Pavonis	705) β	Lyrae	707) o I	Oraconis	706) σ S	agittarii
2.0	ъ.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	18h; 46m	-62° 15′	18 <sup>h</sup> 47 <sup>m</sup>	+33°17′	18 <sup>h</sup> 50 <sup>m</sup>	+59° 18′	18h 51m	-26°22
Jan.	I	37.52 22	24.26	50.599 or	39.61	16.638 56	62.04 350	21.725	TE 2T
Oun.	II	27.74	21.89 229	FO 600	36.69 287	16.694	58.54 350	31.735 137	15.31 32
	21	37.74 30		W- 0-0 139	22.82	16.829 210	58.54 346 55.08 329	31.872 <sub>177</sub> 32.049 <sub>211</sub>	EO 31
	31	38.04 38 38.42 42	17.46	50.828 178	33.82 270	17.039 280	57.70 329		14.38 31
Febr.	10	28.8= 43	17.40 194	51.000 <sub>215</sub>	31.12 244 28.68 207	17.210	51.79 299 48.80 258		T4.07 31
L'ODI.	10	38.85 49	15.52 172	51.221 247	20/	17.319 340		32.500 265	14.07 33
25	20	39.34 52	13.80	51.468 272	26.61 162	17.659 391	46.22 208	32.765 285	13.74 36
März	1	39.00 56	12.35 116	51.740 203	24.99	L TX.050	44.14	33.050	13.38 39
	II	40.42 57	11.19 87	52.033	23.88 56	10.400	42.65 86	33.349	12.99 43
	21	40.99 50	10.32	52.339 214	23.32	1 10.93/ 400	41.79 19	33.660	12.50
	31	41.58 59	9.77 24	52.653 316	23.33 57	19.409 473	41.60 46	33.978 321	12.09 50
Apr.	10	42-17 58	9.53	52.969 312	23.90	19.882 461	42.06	34-299 319	11.59 50
	20	42.75 56	0.62	53.281 300	25.01	20.343 438	43.16	24.618	
	30	43.31	10.04	53.581 283	26.60	20.781 403	44.84 220	34.932 302	TO 60 49
Mai	10	43.31 54 43.85 50	TO 77 /3	53.864 260	28.62 237	21.184 357	47.04 264	35.234 286	10.14
2/4/14	20	44.35 45	TT 80	51.124	20.00	21.541 357	49.68 300	35.520 263	10.14 40
	20		131	54.124 230	30.99 265				9.74 32
	30	44.80 39	13.11	54.354 196	33.64 283	21.844 240	52.68 325	35.783 234	9.42 22
Juni	9	45+19	14.08	54.550 155	36.47 203	22.084	55.93 24I	36.017 200	9.20
	19	45.5- 21	10.47	54.705	39.40	22.256 99	59.34 348	36.217 160	9.09
	29	3 45.76 17	18.42	54.816	42.36	22.355 24	102.82	536.377 117	9.09 ,,
Juli	8	45.93 8	20.49 212	54.881 17	45.26 278	22.379 51	66.27 345	36.494 70	9.20 22
	18	46.01	22.61	54.898	48.04 259	22.328	69.61	26 261	
	28	46.00 10	24.73 203	54.866	50.63 234	22.203 196		26 -8-	9.42 30
Aug.	7	45.90 18	26.76	E4 787	52 07	22.007 260	75.66 257	26 220	9.72 36
	17	45.72 26	28.63 164	54.664 162	52.97 205	21 747	78.23 220	26 484	10.49 41
	27	45.46 31	20.27	54.502	55.02 172	21.747 <sub>317</sub> 21.430 <sub>366</sub>	80.43	36.45/ 113	10.90
	21		30.27 136	54.502 194	56.74 135			36.374 148	39
Sept.	6	45.15 37	31.63 100	54.308 220	58.09 95	21.064 403	82.20	36.226 176	11.29 35
	16	44.78 40	32.63 60	54.088 236	59.04 54	20.001	03.51 81	36.050 194	11.64 27
	26	44.78 40 44.38 41	33.23 18	53.852	59.58 11	20.233 400	84.32 29	35.050 200	11.91 18
Okt.	6	43.97 47	33.41 27	53.010 238	59.69 34	1 19.794	84.61	35.656	12.09 9
	16	43.56 38	33.14 71	53.372 225	59.35 77	19.357 437	84.36 79	35.459 181	12.18
	<b>2</b> 6	43.18	32.43 113	53.147 201	58.58	18.037	83.57	35-278 155	12.16
Nov.	5	42.05	31.30 150	52.946	57.38 162	18.547 347	82.26 183	35.123 121	12.06
	15	42.58 19	29.80 182	52.777	55.76 200	18.200 291	80.43 231	35.002 80	11.87 24
	25	42.39 11	27.98 207	52.777 130 52.647 85	L C 2 7/2		78.12 273	24 022	11.63 29
Dez.	5	42.28	27.98 207 25.91 225	FQ 760	51.42 262	TH 600	75.39 308	24.888	11.34 30
			1	-		TC.		-4	
	15	42.26 7	23.66	52.525 12	48.80 282	17.528 77	72,31 68 07 334	34.902 63	11.04 31
	25	42.33 17	21.31 237	52.537 61	45.98 293	17.451 4	0019/ 350	34.965 109	10.73 30
	35	42.50	18.94	52.598	43.05	17.455	65.47	35.074	10.43
Mittl	l. Ort	39.78	32.17	51.790	30.87	18.942	52.32	32.723	22.84
	, tg 8	2.148	-1.901	1.196	-+-0.657	1.960	+1.685	1.116	-0.496
a,		+5.6	+4.I	+2.2	+4.2	-1-0.9	+4.4	+3.7	+4.5
Ъ,		-0.03	+0.98	+0.01	-+0.98	+0.02	<b>⊹0.08</b>	0.01	+0.97

T:	ag	709) & Se	rpent. pr	711) R	Lyrae	708) λ I	'elescopii	713) γ	Lyrae
	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	18h 53m	+4° 7′	18 <sup>h</sup> 53 <sup>m</sup>	+43°51'	18 <sup>h</sup> 53 <sup>m</sup>	-53° o'	18h 56m	+32°36′
Jan.	I	13.278 109	34.92	29.021	67.55 323	38.332 177	61 94 192	40.699 82	31.19 288
	II	13.387	33.38	29.095 74		38.509 238	60.02 187	40.781	28.31 283
	21	13.532	31.87	29.224	01.14	38.747	58.15	40.908 169	125.48
	31	13.709 205	30.46	29.402	1 50.12 254	39.040 339	56.38 163	41.077	22.79
Febr.	10	13.914 228	29.21 103	29.627 263	55.38 236	39.379 377	54.75	41.283 238	20.35 208
	20	14.142	28.18 76	29.890	53.02 188	39.756	53.28 128	41.521 265	18.27 165
März	Ι	14.388	27.42	30.187	51.14 134	40.105 433	52.00 108	41.786 286	10.02
	II	14.650 273	26.98 11	30.510 341	49.80	40.598 450	50.92 86	42.072 301	15.40
	21	14.923 280	26.87 24	1 10.01	49.06	40.598 41.048 460	50.06 63	42.373	14.85 4
	31	15.203 283	27.11	31.202	48.95 50	41.500 464	49.43 39	42.684 315	14.81 51
Apr.	10	15.486 282	27.68 88	31.557 <sub>350</sub>	49-45 109	41.972 461	49.04 14	42.999 <sub>312</sub>	15.32
	20	15.768 <sub>276</sub> 16.044 <sub>266</sub>	28.56 116	31.907 336	50.54 163	42.433 451	48.90 11	43.311 303	16.37
Mai	30	16.310 250	29.72	32.243 315 32.558 287	52.17 <sub>211</sub> 54.28 <sub>252</sub>	42.884 432	49.01 49.38 37	43.614 287	17.91
1.1001	20	16.560 228	31.11 157 32.68 169	32.845 <sub>252</sub>	56.80 252	$\begin{array}{c} 43.316 \\ 43.722 \\ 371 \end{array}$	50.00	43.901 <sub>266</sub> 44.167 <sub>237</sub>	22.19 261
	20	16.788 201					- 0/		
Juni	30 9	16.989 170	34·37 <sub>175</sub>	33.097 <sub>210</sub> 33.307 <sub>163</sub>	59.63 306 62.69 321	44.093 <sub>328</sub> 44.421 <sub>276</sub>	50.87	44.404 <sub>203</sub> 44.607 <sub>165</sub>	24.80 27.60 292
OLILI	19	17.159 135	36.12 173 37.89 172	33.470 113	65.90 <sub>325</sub>	44.697 218	51.97 <sub>131</sub> 53.28 <sub>147</sub>	44.772 121	30.52 294
	29	L T7.204	39.61 <sub>164</sub>	33·583 59	69.15 322	44.915	54·75 <sub>160</sub>	644.893 75	33.46 291
Juli	8	17.388 94	41.25	33.642	$72.37_{310}^{322}$	45.070 86	56.35 168	44.968 27	36.37 <sub>279</sub>
	18	T7 44T	42.77	22.645	75.47 292	45.156 16	58.03 171	44.005	39.16 261
	28	17.451	44.14 120	33.594 104	78.30	45.172	59.74 167	44.074	41.77
Aug.	7	17.410	45·34 <sub>101</sub>	33.490	81.06 237	45.119 119	61.41	44.974 <sub>68</sub> 44.906 <sub>113</sub>	44.14 209
Ü	17	17.346	46.35 81	33.336 198	83.43 200	45.000 180	62.98 142	44.793	46.23 177
	27	17.238	47.16 60	33.138 235	85.43 161	44.820 232	64.40 119	44.639 187	48.00 141
Sept.	6	17.098	47.76	32.903 264	87.04 118	44.588	65.59	44.452 213	49.41 102
	16	16.934	48.15 ,7	32.639 282	88.22	44.310	66.51 61	44.239 220	50.43 61
01.	26	10.755	48.32	32.356	88.93 24	44.017	67.12 26	44.009 220	51.04 19
Okt.	6	10.570 -0- 1	48.29	32.064 280	89.17 26	43.707 207	67.38 =	43.770 236	51.23 25
	16	16.388 168	48.04 46	31.775 <sub>276</sub>	88.91 75	43.400 286	67.27 47	43.534 224	50.98 68
75.7	26	16.220	47.58 67	31.499 251	88.16	43.114 252	66.80 <sub>82</sub>	43.310 203	50.30 112
Nov.	5	10.073	46.91 87	31.248 218	80.93	42.862	65.98	43.107	49.18
	15	15.950 81	46.04	31.030	85.22	42.059	04.84 ,,,	42.930	47.05 101
Dez.	25	15.875 42	44.98 123	30.854 127	83.07 252	42.515	63.43 163	42.802 <sub>91</sub>	45.74 226
D62.	5	15.833 0	43.75 139	30.727 74	80.54 285	42.438 6	61.80 178	42.711 45	43.48 254
	15	15.833 43	42.36	30.653 19	77.69 308	42.432 65	60.02 187	42.666	40.94 276
	25	15.876 83	40.87	30.634 39	74.61 323	42.497	58.15	42.670 52	38.18 287
	35	15.959	39.32	30.673	74.61 323	42.631	56.24	42.722	35.31
Mittl.		14.153	26.82	30.480	58.13	40.006	69.28	41.856	22.00
sec δ,			+0.072		+0.961		-1.328	•	0.64 <b>0</b>
a, b,					+4.6		+4.7		+4.9
υ,	U	0.00	+0.97	+0.01	+0.97	-0.02	+0.97	+0.01	+0.97

Febr. März		AR.	Dekl. +13°46′	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
Jan. Febr. März	I II		-1 12° 16'		1				
Febr. März	11		1 1 3 40	19 <sup>h</sup> 3 <sup>m</sup>	-4° 58′	19h 5m	-37° 59′	19 <sup>h</sup> 6 <sup>m</sup>	-21° 6
Febr. März	11	38.161	31.12	2.985 106	18.73 98	22.341	52.46 108	10.828 116	67.46
Febr. März		38.254 130	20.08	3.091	TO 7T	22.475 180	51.38 108	10.944	67.43
Febr. März		38.384 164	27.07 189	3.233	20.67	22.655		11.098 180	67.39
Febr. März	31	38.548 194	1.25.18	3.407 202	21.56	22.876	16	11.287 218	07.22
März	10	38.742 219	23.48	3.609 226	22.33 61	23.132 286	48.26	11.505 243	67.21 18
März	20	38.961 242	22.05		22.94			11.748 263	
	1	20.202	20.95	3.835 245	22 24	23.418 311	47.30	12.011 280	67.03 25 66.78 34
	II	39.203 259	20 22 72	4.080 261	/	23.729 330	15 56 04	12.011 280	66 44 34
	21	39.462 272	30	4.341 272	23.51 8	24.059 345	1480	12.201 293	66.44 44
	31	39.734 281	19.93	4.613 282	23.43 34	24.404 356		12.584 302	66.00 54
	31	40.015 286	20.05	4.895 287	23.09 59	24.700 361	44.12 59	12.886 308	05.40 61
Apr.	10	40.301 286	20.59 95	5.182 287	22.50 81	25.121 362	43.53 48	13.194 309	64.85 68
	20	40.587 281	21.54	5.469 282	21.69	25.403 357	43.05 35	13.503	04.17
	30	40.868	22.85 161	5.752	20.68	25.840 347	42.70 21	13.800	03.40
Mai	10	41.138	24.46	0.020	19.52	20.187	42.49 5	14.100 -0-	02.74
	20	41.392 233	26.32 205	6.286	18.25	26.517 <sup>33°</sup> <sub>3°5</sub>	42.44	14.389 263	62.04 65
	30	41.6256	28.37 217	6.526	16.01	26.822	42.55	14.652 237	61.39 57
Juni	9	41.831	30.54 222	6.742	15.50 122	27.097 237	12.84	14.889 205	00.02 ,0
	19	42.004 137	32.76	6.927	14.23 126	27.334 193	43.29 61	15.094 168	60.34 36
	29	42.141 96	34.98 214	7.070	12.97	27 527	43.00	15.262 126	59.98 24
Juli	8	7 42.237 54	37.12 203	<sup>7</sup> 7.186 68	11.80	8 <sup>27.527</sup> 144 27.671 92	44.65 87	15,388 81	59.74 12
	18	42.291 10	39.15 187	7.254 24	10.75	27 762	15.52	TE 460	59.62
	28	42,301	41.02 168	7 278	0.84	27 800	46.46	TE 504	E0 62
Aug.	7	42.267	12 70	7 250	0.08	27 782	17 15 99	TE 401	59.71 17
-	17	12 102 /4	44.15 119	7 100	8.47	27 711	48.43	TE 424 5/	EO 88
	27	42.081	15.21	7 101	8.02 43	27 502	10 26 93	TE 226	60.11 27
			75	131	31		04	-34	
Sept.	6	41.937 169	46.27 65	6.970	7.71	27.431 195	50.20	15.202 163	60.38 27
	16	41.768 186	46.92	6.814	7.54 4	27.236 217	50.90 53	15.039 181	60.65 25
	26	41.582 194	47.29 7	0.040	7.50 10	27.019	51.43	14.858 191	00.90
Okt.	6	41.388 192	47.36	6.459 179	7.60 21	26.790 227	51.76	14.007	01.13 ,8
	16	41.196 180	47.13 53	0.280 168	7.81 34	26.563 213	51.87	14.477 177	61.31 14
	26	41.016 160	46.60 82	6.112	8.15 46	26.350 188	51.76	14.300 155	61.45 8
Nov.	5	40.856	45.78 110	5.900 0	8.6T	26.162	51.43	14.145	61.53
	15	40.723 98	44.68	5.848 83	9.18 57		50.80	14.021 87	61.58
	25	40.625 59	43.31 161	5.705	0.87	25.903 68	50.18 71		61.60
Dez.	5	40.566 18	41.70 180	5.722 43	10.66 79	25.845 <sub>4</sub>	49-34 95	13.889	61.60
	15	40.548 25	39.90 196	5.720	77.55	25.841	48.39 102	12.880	61.60
	25	40.573 66	37.94 205	r 760	T2 52	25 80T	47.37 105	T2 025	61.50
	35	40.639	35.89	5.841	13.52	25.993	46.32	14.024	61.59
Mittl.	Ort	20.054	22.50	2845	,				
sec 8, t		39.074	22.50	3.847	26.55	23.534	59.21	11.770	74.64
a, a'			+0.245		-0.087		-0.78I	1.072	-0.386
b, b'			+5.4 +0.96		+5.4 +0.96		+5.6 +0.96	+3.6 -0.01	+5.7 +0.96

Ta	12	723) δ	Draconis	724) &	Lyrae	725) ω.	Aquilae	726) x	Cygni
	7.5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl,
19	40	19 <sup>h</sup> 12 <sup>m</sup>	+67° 33′	19 <sup>h</sup> 14 <sup>m</sup>	+38° 1′	19h 14m	+11°29′	19 <sup>h</sup> 15 <sup>n</sup>	+53°15
Jan.	I	29.62	33.55 347	15.815	43.37 301	59.058 82	17.97 188	41.171	36.87
	II	20.60		15.871 104		59.140	16.09 186	4T.TO7	33.52 333
	21	20.60	- 6 350		37·36 <sub>288</sub>	59.259 154	14.23	41.290 157	20 TE 33/
	31	20.88	20.58 340 23.18 316	16.125	34.48 265	59.413 183	12.48 175	41.447 217	26.89 302
Febr.	10	30.17 39	20.02 280	16.318 193	31.83 231	59.596 210	10.90	41.664 270	23.87 266
	20	20.56		16.547 262	29.52 188				200
März	I	30.56 46	17.22 234	16.809 288	27.64	59.806	9.56	41.934 318	21.21
212 101 22	11	31.02 52		17.007	27.64 138 26.26 %	60.039 251	8.53 66	42.252 356 42.608 385	19.00 166
	21	31.54 58	13.09 118	17.097 310	25 44 02	60.290 266 60.556 278		42.003 385	17.34 106
	31	32.12 60	11.91 52	17.407 324	25.20	60.550 278	7.59 13	42.993 404	15.85 43
	31	32.72 61	11.39 15	17.731 331	33	60.834 284	7.72 54	43.397 414	
Apr.	10	33.33 61	11.54 79	18.062	25.55 92	61.118 286	8.26	43.811 412	16.06 85
	20	33.94 58	12.33	10.393 225	26.47	61.404 283	9.18 92	44.223 401	10.01
37.7	30	34.52 54	13.73 196	10./10	27.92	61.687 275	10.44	44.624 378	10.35 108
Mai	10	35.06 48	15.69 245	19.028 289	29.85 222	01.902 267	11.99 180	45.002 247	20.33
	20	35.54 42	18.14 284	19.317 260	32.17 265	62.223 241	13.79 198	45.349 306	22.77 282
	30	35.96 33	20.98 316	19.577 225	34.82 290	62.464 216	15.77 209	45.655 258	25.59 311
Juni	9	30.29	24.14 337	10.802 .	37.72	62.680	17.86 214	45.913 202	28.70 332
	19	36.53 15	27.51 350	19.987 139	40.77	02.805	20.00	46.115 142	32.02 342
	29	36.68 4	31.01	20.126 91	43.89 311	03.014	22.14	46.257 79	35.44 244
Juli	9	36.72 5	34.55 348	20.217 39	47.00 302	63.123 67	24.21 196	46.336 13	35.44 38.88 338
	18	36.67	38.03 334	20.256	50.02 287	63.190 24	26.17 180	46.349 53	42.26 323
	28	36.52 24	41.37 313	20 242	52.89 265	62 211	27.97 161	46.296 117	45.49 301
Aug.	7	20.20		20 180	55.54 237	62 104	20 58	46 T70	10.50
	17	35.94 41	44.50 <sub>285</sub> 47.35 <sub>250</sub>	20.068	57.91 205	63.132	20.08	46.002 231	ET 22 -/3
	27	35.53 48	49.85 250	19.913	59.96 169	63.031 134	32.15	45.771 277	53.62 200
Sept.	6	35.05 53	51.97 167	19.720	61.65	62.897 160	22.06	45-494 315	== 60
	16	34.52 57	53.64 118	19.496	62.93 86	62.737	22.77	45.179 343	57.19 109
	26	33.95 60	F 4 8 2	19.251 256	62 70	62.558 189	24.00	44.836 343	58.28
Okt.	6	33.35 60	55.50	18.995 258	64.21	62.369 188	24 TO		-8 8- 39
	16	32-75 59	55.64	18.737 248	64.16	62.181	34.01	44.117 353	58.95
	26		7-		52		22.56		-0 -0
Nov.		32.16 57	55.22 96	18.489 230	63.64 98	62.002	33.56 32.84 00	43.764 331	F7 F7
.101.	5 15	31.59 52	54.26	18.259 202	67.00	61.840	32.04 99	43.433 299	57.52 151
	25	31.07 45	52.75 202	18.057 165 17.892 122	61.22 186	61.705 102 61.603 65	31.85 <sub>123</sub> 30.62 <sub>146</sub>	43.134 <sub>256</sub> 42.878 <sub>205</sub>	56.01 199
Dez.	5	30.62 38 30.24 30	50.73 <sub>249</sub> 48.24 <sub>289</sub>	T7 760	59.36 57.12 <sub>258</sub>	61.538 65	29.16 165	42.673 146	54.02 243 51.59 282
			1	, ,		_			
	15	29.94 19	45.35 321	17.693 27	54.54 282	61.512 16	27.51 180	42.527 83	48.77 312
	25	29.75 9	42.14 343	17.666	51.72 299	61.528	25.71 189	42.444 17	45.65 331
	35	29.66	38.71	17.690	48.73	61.585	23.82	42.427	42.34
	- Ort	32.70	21.69	17.039	32.97	59.939	9.22	42.934	25.49
sec 8.		2.619	+2.421		+0.782	1.020	÷0.203	1.672	+1.340
a,		0.0	+6.2		+6.4		-+6.4	+1.4	+6.5
Ъ,	b'	+0.05	+0.95		+o.95		-+0.95	-0.03	+0.95

Ta	ag	729) τ	Draconis	728) a Sa	ngittarii	730) δ 1	Aquilae	733) ι	Cygni
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	19 <sup>h</sup> 16 <sup>m</sup>	+73° 14′	19 <sup>h</sup> 19 <sup>m</sup>	-40° 43'	19 <sup>h</sup> 22 <sup>m</sup>	+2° 59′	19 <sup>h</sup> 28 <sup>n</sup>	+51°35′
Jan.	I	38.83 8	53.47 345	42.644 119	44.45 128	27.504 82	45.67 139	9.950	76.52 329
	II	28 77	50.02 348	42.763 166	43.17	27.586	44.28	0.062	
	21	38.82 21	46.54 340	42.929 210	41.87 128	27.704 151	42.91 128	10.037 75	69.91 324
	31	39.03 34	43.14 319	43.139 249	40.59 125	27.855 181	41.63	10.173	66.67 302
Febr.	10	39.37 34	39.95 285	43.388 281	39.34 119	28.036 206	10.40	10.367 248	63.65 271
			-				74		
März	20	39.84 58	37.10 240	43.669 309	38.15	28.242 228	39.55 68	10.615 294	60.94 227
Mill	I	40.42 67	34.70 186	43.970 332	37.02 106	28.470 248	38.87 39	10.909 334	58.67
	11	41.09 73	32.84 126	44.310 350	35.96 96	28.718 262	38.48 7	11.243 365	56.93
	21	41.02	31.58 61	44.660 364	35.00 86	28.980 275	38.41 26	388	55.77 5+
	31	42.60 79	30.97 4	45.024 373	34.14 74	29.255 282	38.67 59	11.996 399	55.23
Apr.	10	43.39 78	31.01 70	45·397 <sub>375</sub>	33.40 61	29.537 286	39.26 89	12.395 402	55.33 72
	20	44.17 75	31.71	45.772	32.79 44	29.823 285	40.15 116	12.797 395	56.05 132
3.5	30	44.92	33.02 187	46.146 365	32.35 28	30.108 278	41.31 139	13.192 376	57-37 187
Mai	10	45.62 61	34.89 236	40.511	32.07 9	30.386 266	42.70 157	13.508 350	59-24 234
	20	46.23 52	37-25 277	46.860 349	31.98	30.652 248	44.27 170	13.918 313	61.58 273
	30	46.75 42	40.02	47.187 206	32.09 31	30.900 225	45.97 176	14.231 268	64.31 305
Juni	9	47.17 30	43.12	47.483 258	32.40 51	31.125 195	47.73	14.499 217	67.36 326
	19	47.47 16	46.45 347	47.741	32.91 69	31.320	49.50 174	14.716 160	10.02
	29	47.63 4	49.94 222	47.956	33.60 86	31.481	51.24 166	14.876 99	74.02
Juli	9	47.67	53.44 348	48.120	34.46 99	31.604 81	52.90 155	14.975 36	77.45 339
	18	47.58		48.230	35.45 109	31.685 37	54.45 139	15.011	80.84
	28	47.36 34	56.92 60.28 336	1 48.284	36.54 115	2T.722	55.84 122	T4.082	84.10 307
Aug.	7	47.02	63.45 290	18 280 4	37.69 116	31.715. 48	57.06	T4.80T	87.17 280
	17	16.57 45	66.35 257	48.220 111	38.85	31.667 88	ES 00	T4 741	89.97 248
	27	46.01 65	68.92 219	48.109 158	39.96	31.579 121	58.93 63	14.536 252	92.45 211
Sept.	6	45.36 72		-	40.07	31.458 149	50.56	14.284 291	94.56 168
or	16	44.64 77	71.II <sub>176</sub> 72.87 <sub>128</sub>	47.95 <sup>1</sup> 194 47.757 222	41 84	31.309 169	50.08	13.993 319	96.24 123
	26	43.87 81		47.535 236	12 52	31.140	60.20	13.674 337	07.47
Okt.	6	43.06 82	74.02	47.299 238	42.00	30.961 <sub>181</sub>	60.22	13.337	08 21
	16	42.24 80	7- 18	47.061 227	43.21 3	30.780	60.04 18	12.993 337	98.43 29
	26		74.88		,		FO 66	33/	
Nov.		41.44 78 40.66 72		46.834 203	43.18	30.608	59.66 59.08 76	12.656 320	98.14 83
1101.	5 15	20.04 72	74.02 140 72.62	46.631 170	12 26 33	30.453 129	59.08 <sub>76</sub> 58.32 <sub>03</sub>	12.336 292	97.31 135
-		39.94 65	72.02	46.461	41.62 74	30.324 98		12.044 252	95.96 184
Dez.	25 5	39.29 55 38.74 43	70.70 240 68.30 281	46.335 77 46.258 23	40.69 93	30.226 62 30.164 23	57·39 <sub>110</sub> 56.29 <sub>124</sub>	11.792 205 11.587 151	94.12 229 91.83 269
				3		_3	· ·		
	15	38.31 31	65.49 315	46.235	39.62	30.141	55.05 134	11.436 92	89.14
	25 35	38.00 18 37.82	62.34 339 58.95	46.267 85 46.352	38.45 123 37.22	30.158 57 30.215	53.71 <sub>140</sub> 52.31	11.344 29	86.13 <sub>323</sub> 82.90
-		31.02	30.93	4~.332	37				
	l. Ort	43.02	41.02	43.919	50.35	28.349	37.41	11.563	64.38
sec δ		3.469	+3.322	1.320	-0.86 <b>I</b>	1.001	+0.052	1.610	+1.262
a,		-1.1	+6.6	+4.2	+6.8	+3.0	+7.1	+1.5	+7.5
b,	0	+0.07	0.94	-0.02	+0.94	0.00	+0.94	+0.03	$\pm$ 0.93

Ta	a.or	732) ß	Cygni $pr$	736) 52 S	agittarii	738) &	Cygni	742) δ	Cygni
		AR.	Dekl	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	19h 28m	+27°49′	19 <sup>h</sup> 33 <sup>m</sup>	-25° o"	19 <sup>h</sup> 34 <sup>m</sup>	+50° 4'	19 <sup>h</sup> 43 <sup>m</sup>	+44° 58′
Jan.	r	17.024	67.22 260	2.470	57.56	48.370 6	65.22 61.00 323	4.637 8	73.00 310
	11	17.077	64.62 260	2.560	1 7/.24	48.376 66	01.99	4.645 62	00.00
	21	17.172	62.02 250	2.090 .66	56.83	48.442 726	58.72 321	4.707 114	66.75 3c8
	31	17.306	59.52 231	2.856	56.42 47	48.568	55.51 301	4.821 165	03.07
Febr.	10	17.478 204	57.21 202	3.055 226	55.95 52	48.750 234	52.50 270	4.986 211	60.76 262
	20	17.682	55.19 164	3.281 251	55.43 -9	48.984	49.80 228	5.197 253	58.14 221
März	I	17.915 - 0	53.55 119	3.532	54.85 65	49.264	47.52 177	5.450	55.93 173
	II	18.173	52.36 71	3.803	54.20	49.503	45.75 120	5.740	54.20 118
	21	10.450	51.65 18	4.092	54.20 72 53.48 77	49.934	44.55 58	6.059 312	53.02 59
	31	16.743 303	51.47 35	4.395 313	52.71 82	50.308 388	43.97 5	6.401 357	52.43 3
Apr.	10	19.046 306	51.82 85	4.708	51.89 84	50.606	44.02 68	6.758 363	52.46 63
	20	19.352 304	52.67	5.02/ 220	51.05 84	1 11.000 .0_	44.70	1 7.121 -	53.09 121
	30	19.050	54.00 176	5.347 215	50.21	51.4/5 200	45.97 181	7.482	54.30 174
Mai	10	19.951 -0-	55.70	5.002	49.41	51.047	47.78	1 ()	50.04 220
	20	20.231 258	57.87 241	5.966 288	48.07 65	52.194 313	50.06 269	8.163 303	58.24 259
	30	20.489 229	60.28 262	6.254 264	48.02	52.507 271	52.75 <sub>301</sub>	8.466	60.83 291
Juni	9	20-718 194	62.90	6.518	47.49 40	52.778 223	55.70	8.733	03.74
	19	20.912 156	05.05 282	0.751 708	47.09 26	53.001 168	1 50.99	8.957	00.0/ 997
	29	21.068	68.47	0.949 , 76	46.83 10	53.169 110	02.35 242	0.122	70.14 222
Juli	9	21.181 66	71.27 271	7.105	46.73 5	53.279 48	05.77 338	9.256 67	73.40 329
	18	21.247 19	73.98 258	7.215 62	46.78 19	53-327 14	69.15 327	9.323 9	76.75 318
	28	21.266 28	76.56	7.277 14	40.97	53.313 76	12.44 208	9.332 48	79.93
Aug.	7	21.238	70.93	7.291 34	47.27	53.237 134	15.50 282	9.284	02.93 276
	17	21.104	81.00	7.257 80	47.07	53.103 188	78.33	9.182	85.69 216
	27	21.049 152	82.90 152	7.177 120	48.12 49	52.915 234	80.84 215	9.029 198	88.15 211
Sept.	6	20.897	84.42	7.057 152	48.6r	52.681 274	82.99	8.831 234	90.26 172
	16	20.715	85.58 80	0.905	49.10	52.407	04.73 128	0.597 262	91.98 128
ev.	26	20.511	86.38	0.720	1 49.55 20	52.104	86.01 81	8.334 282	93.26 82
Okt.	6	20.205	86.79	0.537	49.94	51.783	86.82 30	8.052 289	94.08 34
	16	20.076 212	86.80 -	6.343 187	50.25	51.454 324	87.12	7.703 286	94.42 16
	26	19.864 196	86.40 <sub>80</sub>	6.156 169	50.46	51.130 300	86.90 74	7.477 273	94.26 66
Nov.	5	10.008	85.60	5.987	50.58	50.821 282	86.10	7.204	93.60
	15	19.490 141	84.41	5.845 108	50.60	50.539 245	04.90 176	6.954 217	92.43 164
	25	19.355 104	02,04 TOO	3.131 68	50.53 14	50.294	03.14 221	0.13/ 176	90.79 208
Dez.	5	19.251 62	80.94 220	5.669 25	50.39 21	50.093 149	80.93 261	6.561 131	88.71 248
	15	19.189 19	78.74 243	5.644	50.18 25	49.944 93	78.32 293	6.430 SI	86.23 280
	25	19.170 24	76.31 257	5.663 63	49.93 20	49.851	75.39 317	6.349 27	83.43 302
	35	19.194	73.74	5.726	49.64	49.817	72.22	6.322	80.41
Mittl		18.019	56.90	3.453	63.62	49.880	52.76	5.924	60.46
sec 8		1.131	÷0.528	1.104	-0.467	1.558	+1.195	1.414	+0.999
a,		+2.4	+7.5	+3.6	+7.9		+8.1	+1.9	+8.7
ъ,	b'	+0.01	+0.93		+0.92	<b>⊹0.03</b>	+0.92	+0.03	+0.90

Ta	n or	741) Y	Aquilae	743) 8 Sa	agittae	745) α A	quilae 1)	747) s I	raconis
10	<b>*</b> 5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	19 <sup>h</sup> 43 <sup>m</sup>	+10°27'	19 <sup>h</sup> 44 <sup>m</sup>	+18°23′	19 <sup>h</sup> 47 <sup>m</sup>	+8° 42′	19 <sup>h</sup> 48 <sup>m</sup>	+70° 6′
Jan.	1	23.563	65.93 174	41.817	15.98 213	50.506	39.63 162	20.00	69.76
	II	22 618 33	64.19	41.864	13.85 214	50.562	38.01 161	19.87 2	66.44 344
	21	23.710 92	02.45	41.948	11.71 206	50.654 126	36.40	19.85	63.00
	31	23.836 158	60.80	42.069	9.65 189	50.780	34.87 138	10.06	50 FF 3+3
Febr.	10	23.994 186	59.30 128	42.224 185	7.76	50.937 186	33.49 117	20.18	56.25 304
	20	24.180 212	58.02	42.400	6.11	51.123 211	32.32 89	20.51	53.21 266
März	1	24,302	57.03 66	42.621	4.70 05	51.334 222	31.43	20.05	50.55
	II	24.020	56.37 29	42.050	3.83 52	51.567	30.86	21.4/	48.38
	21	24.879 268	56.08	1 43.115 274	3.31 7	51.820 268	30.66	22.00 61	46.77 99
	31	25.147 280	56.19 49	43.389 285	3.24 38	52.088 279	30.83	22.70 68	45.78 34
Apr.	10	25.427 287	56.68 87	43.674 293	3.62 83	52.367 287	31.37 90	23.38 68	45-44 31
	20	25.714	57.55 121	43.907	4.45	52.654	32.27	24.06 67	45.75 94
	30	26.003 285	58.76	44.201	5.68 160	52.944 285	33.50	24.73 64	40.09
Mai	10	20.288	00.28	44.551 278	7.28	53.229 277	35.01 174	25.37 59	48,23 208
	20	20.502	02.04 194	44.829 262	9.19 216	53.506 <sub>261</sub>	36.75 192	25.90 52	50-31 254
	30	26.821 236	63.98 207	45.091 238	11.35 232	53.767 239	38.67 203	26.48	52.85 292
Juni	9	27.057	00.05	45.329 208	13.07	54.006	40.70 208	20.92	55.77 222
	19	27.266	08.19	45.537 173	110.11	54.217 178	42.78 208	21.21 25	58.99 343
T 11	<b>2</b> 9	27.441 136	70.32	45.710 134	1 10.50	54.395 140	44.86 201	27.52	02.42
Juli	9	27.577 <sub>94</sub>	72.40 198	45.844 90	21.02 237	54.535 99	46.87	27.66 3	65.96 357
	18*)	27.671 51	74.38 184	45.934 45	23.39 222	54.634	48.78	27.69 8	69.53 352
	28	27.722 6	70.22	45.979	25.61 204	54.688 11	50.55 TE8	27.61	13.03 228
Aug.	7	27.728 37	77.88	45.979 44	27.05	54.699 33	52.13	27.41 29	70.43 317
	17	27.091 _0	79.33 122	45.935 85	29.47 157	54.666 73	53.50 116	27.12 39	79.00 280
	27	27.613 114	80.55 98	45.850 122	31.04 129	54.593 110	54.66	20.73 48	82.49 255
Sept.	6	27.499 143	81.53 72	45.728 153	32.33 100	54.483 140	55.57 67	26.25	85.04 216
	16	27.350 166	82.25 46	45.575 126	33.33 68	54.343 ,62	56.24	25.71 61	87.20
	26	27.190	82.71 20	45.399 100	34.01 36	54.181 176	56.67	25.10 64	88.92
Okt.	6	27.010	82.91 6	45.209	34.37	54.005 181	$56.84 \frac{7}{8}$	24.46 66	90.15 70
	16	26.826	82.85	45.014 191	34.40 30	53.824 176	56.76	23.80 <sub>67</sub>	90.85 16
	26	26.647 166	82.52	44.823	34.10 64	53.648 164	56.43 57	23.13 66	91.01 40
Nov.	5	20.481	81.93	44.040	33.46 95	53.484	55.86	22.47 62	00.61
	15	20.330 116	81.08	44.489 128	32.51 126	53.342	55.06 102	21.85 58	89.64 152
**	25	26.220 83	79.99	44.361	31.25 155	53.228 81	54.04 123	21.27 50	00.12
Dez.	5	26.137 47	78.69 150	44.266 58	29.70 179	53.147 45	52.81 140	20.77	86.08 251
	15	26.090 8	77.19 164	44.208 19	27.91 198	53.102 7	51.41	20.36	83.57 291
	25	26.082 =	75.55	44.189 21	25.93	53.095	49.87 162	20.04	80.66
	35	26.113	73.81	44.210	23.82	53.126	48.25	19.83	77.44
	. Ort	24.385	56.85	42.674	6.04	51.318	30.81	23.10	54.96
sec 8		1.017	+o.185		<b>+0.332</b>	1.012	-+0.153	2.940	+2.765
a,			+8.7	+2.7	+8.8	+2.9	-+9.I	-0.2	<del>-</del> +9.1
b,	b'	+0.01	+0.90	+0.01	-+0.90	0.00	+o.89	+0.08	-+0.89

<sup>1)</sup> Die jährliche Parallaxe (0.204) ist bereits berücksichtigt. \*) Bei Stern 745) und 747) lies Juli 19.

Ta	0.07	749) ß	Aquilae	748) ε P	avonis	750) Ý	Cygni	751) 9 <sup>1</sup> S	agittarii
	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	19 <sup>h</sup> 52 <sup>m</sup>	+6°15′	19 <sup>h</sup> 53 <sup>m</sup>	-73°3′	19 <sup>h</sup> 54 <sup>m</sup>	+52° 16′	19 <sup>h</sup> 55 <sup>m</sup>	-35°26′
Jan.	I	21.119	28.79 150	37.12	75.82 298	3.186	58.06 319	48 900 70	20.35 102
0 33==-	II	21.169 50	27.20 149	37.19 21	72.84	2.157	54.87 319	48.970 113	19.33 110
	21	21.255 120	25 80	37.40 33	69.80	2.101	51.59 325	49.083	18.23
	31	21.375 150	24 28 142	37·73 <sub>46</sub>	66.79 292	2.288	48.34 311	49.237 192	17.09 117
Febr.	10	21.525 180	23.11 108	38.19 56	63.87 292	3.445 214	45.23 284	49.429 226	15.92
1 001.						1		1	
31	20	21.705 205	22.03 82	38.75 65	61.11	3.659 266	42.39 245	49.655 256	14.72
März	I	21.910 228	21.21	39.40 73	50.50 225	3.925 312	39.94 197	49.911 281	13.51
	II	22.138 247	20.70 17	40.13 79	56.33 194	4.237 349	37.97 142	50.192 305	12.31
	21	22.305 264	20.53 18	40.92 84	54.39 158	4.586 379	36.55 81	50.497 323	11.12
	31	22.649 277	20.71 53	41.76 88	52.81 130	4.965 399	35.74 19	50.820 339	9.98 109
Apr.	10	22.926 285	21.24 87	42.64 89	51.61	5.364 409	35.55 44	51.159 348	8.89 101
	20	23.211 289	22.11 118	43.53 90	50.82 37	5.773	35.99 105	51.507 254	7.88 or
	30	23.500 286	23.29	44.43 88	50.45	6.181	37.04 162	51.801 352	6.97 76
Mai	10	23.786 278	24.73 166	45.31 85	50.50 48	0.577 375	38.66	52.213 344	6.21 60
	20	24.064 265	26.39 182	46.16 79	50.98 91	6.952 343	40.78 256	52.557 329	5.61 42
	30	24.329 243	28.21 191	46.95 72	51.89 129	7.295 302	43.34 291	52.886 <sub>306</sub>	5.19 23
Juni	9	24.572	30.12	47.67	53.18 166	7.597 252	40.25	53.192	4.96 r
	19	24.789 ,81	32.08 195	48.31	54.84 198	7.850 198	49.42 116	53.467 238	4.95 21
	29	24.973 T16	34.03 188	40.04	56.82	8.048	32.10 244	53.705	5.16
Juli	9	25.119 106	35.91 177	49.26 28	59.06 245	8.186 75	56.22 345	53.899 144	5.56 59
	19	25.225 62	37.68 163	20 49.54 15	61.51 256	8.261	59.67 338	54.043 92	6.15
	28	25.287 18	39.31	49.69	104.07	8.270	103.05	54.135 38	6.90 88
Aug.	7	25.305 26	40.76	49.69	66.68	8.214	66.27	54.173 16	7.78
	17	25.279 67	42.02	49.56	09.24	8.097 176	09.27	54.157 69	8.75
	27	25.212 103	43.06 82	49.29 40	71.67 219	7.921 227	71.98 237	54.088	9.76
Sept.	6	25.109 135	43.88	48.89 50	73.86 188	7.694 271	74.35 198	53-973 155	10.76
	16	24.974	44.47 36	48.39 -8	75.74 118	7.423 305	76.33	53.818 186	11.69 83
	26	24.816	44.83	47.81 65	77.22	7.110 320	77.87	53.632	12.52 69
Okt.	6	24.044	44.96	47.10 67	78.25	6.789 341	78.94 57	53.426	13.21 50
	16	24.465 176	44.86	46.49 68	78.78	6.448 341	79.51 4	53.211 213	13.71 30
	26	24.280	44.53	45.81 65	78.77	6.107 330	79.55 49	52.998 198	14.01 8
Nov.	5	24.126	43.99 76	45.16 59	78.21	3.111 208	79.06	52.800	14.09
	15	23.983 116	43.23 96	44.57	77.13	5.469 276	78.04	52.626	13.96
	25	23.867 84	42.27 115	44.57 51 44.06 41	75.56 201	5.193 234	76.50 203	52.486 99	13.62 52
Dez.	5	23.783 49	41.12	43.65 28	73.55 238	4.959 184	74.47 246	52.387 55	13.10 70
	15	23.734 11	39.82	43.37 15	71.17 267	4.775 129	72.0I .o.	52.332 8	12.40 83
	25	$23.723 \frac{11}{26}$	38.40	43.22	68.50 287	4.646 69	69.19 309	52.324 40	11.57 93
	35	23.749	36.89	43.21	65.63	4.577	66.10	52.364	10.64
Mitt	l. Ort	21.913	20.12	41.35	78.32	4.670	44.23	50.053	24.53
	$\delta$ , tg $\delta$	1.006	-+0.110	3.434	-3.286	1.635	+1.293		-0.712
	a'	+2.9	+9.4	+6.9	+9.5	+1.6	+9.6	+3.9	+9.7
<i>b</i> ,		0.00	+0.88	-0.10	+o.88	÷0.04	+o.88	-0.02	+0.88
-,						· · · · · · · · · · · · · · · · · · ·			

T.	ag	752) Y	Sagittae	754) δ I	Pavonis	756) 9	Aquilae	759) ×	Cephei
	b	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	19 <sup>h</sup> 56 <sup>m</sup>	+19°19′	20 <sup>h</sup> 2 <sup>m</sup>	-66° 19′	20 <sup>h</sup> 8 <sup>m</sup>	-o° 59′	20 <sup>h</sup> 10 <sup>m</sup>	+77°31'
Jan.	r	4.420	51.19 213	48.59 6	72.78 266	11.775	55.08	52.05 26	70.84 314
	11	1 151 34	49.06 215	48.65	70.12 276	TT 816 T	56.13 102	51.69 18	1 (17.70)
	21	4.527 109	46.91 209	48.80	67.36 276	11.892 76	57.TE	5T.5T =	64.37 341
	31	4.636	44.82	49.05 32	04.00	12.000 140	58.09 82	ET 52	[ [ ]( ] _ [ ] [ ]
Febr.	10	4.779 175	42.89 170	49.37 41	61.89 259	12.140 168	58.91 65	51.72 40	57.61 335
	20	4.954 202	41.19 138	49.78	59.30	12.308 194	59.56	52.12 56	54.45 285
März	1	5.157 220	39.81	50.25	56.88 220	12.502	60.00 18	52.68 72	51.60
	II	5.387 252	38.80	1 50.70 28	54.68 193	12.721	60.18 -	53.40 84	49.17
	21	5.639 270	38.21	1 51.30 62	52.75 164	12.960	60.08	54.24 94	47.26
	31	5.909 284	38.08 33	51.98 64	51.11 131	13.218 273	59.69 68	55.18 101	45.92 72
Apr.	10	6.193 293	38.41 77	52.62 66	49.80	13.491 284	59.01 94	56.19 104	45.20
	20	1 0.480	39.18	53.28 67	48.84	13.775	58.07	57.23 103	45.13 57
	30	0.703 204	40.38 158	53.95 67	48.27 18	14.000	56.88	58.26	45.70
Mai	10	7.077 285	41.96	54.62	48.09	14.357 286	55.50 154	59-25	46.87 173
	20	7.362 268	43.85 216	55.26 61	48.30 60	14.643 274	53.96 165	60.18 83	48.60 224
	30	7.630	46.01 234	55.87 57	48.90	14.917 257	52.31 170	61.01	50.84 266
Juni	9	7.8770	48.35 246	50.44	49.89	15.174	50.61	61.72 58	53.50
	19	8.095 182	50.81	50.94	51.24 167	15.405	48.92	62.30 42	50.51 228
т 11	29	0.278	53.33 250	57.37 25	52.91	15.606 165	47.27 156	62.72	159.19 -1-
Juli	9	8.422	55.83 243	57.72 25	54.86 217	15.771 125	45.71 144	62.97 9	63.24 355
	19	8.523 56	58.26 230	23 57.97 15	57.03 232	15.896 81	44.27 129	63.06	66.79 356
	<b>2</b> 8	0.579 <sub>10</sub>	00.50	58.12	59.35 240	15.977 37	42.98	62.98 26	10.33 218
Aug.	7	8.589 35	62.09 191	58.17 6	61.75	16.014	41.87 92	62.72	73.03 221
	17	8.554	64.60	58.11 16	04.15	16.007	40.95 73	62.31	77.17 211
	27	0.477	66.26	57·95 <sub>25</sub>	60.46 213	15.958 88	40.22 54	61.74 70	80.29 283
Sept.	6	8.362	67.64 109	57.70 33	68.59 187	15.870 121	39.68	61.04 82	83.12 248
	16	8.210	68.73	57.37	70.40	15.749 146	39.33	60.22	85.60 208
01.	26	0.045	69.50	50.97	72.00	15.603 163	39.16	59.29 100	87.68 167
Okt.	6	7.858	69.94 11	50.53	73.14 69	15.440	39.16	58.29 105	89.31 113
	16	7.664 192	70.05 23	50.00 48	73.83 20	15.268 171	39.32	57.24 108	90.44 61
	26	7.472 180	69.82	55.58 45	74.03 30	15.097 161	39.64 46	56.16 107	91.05 4
Nov.	5	7.292 162	09.25	55.13 42	73.73 70	14.936	40.10 60	55.09	91.09 -
	15	7.130	68.35	54.71	72.94 125	14.793 118	40.70 73	54.04 98	90.50
_	25	0.995	07.14	54.30	71.09 168	14.075 88	41.43 85	53.00	89.46 165
Dez.	5	6.892 68	65.64 176	54.08 20	70.01 203	14.587	42.28 94	52.16 78	87.81 216
	15	6.824 30	63.88	53.88 10	67.98 233	14.532 19	43.22 102	51.38 65	85.65 261
	25	6.794	01.92	53.78	05.05 254	14.513	44.24 106	50.73 48	83.04 299
	35	6.803	59.81	53.78	63.11	14.530	45.30	50.25	80.05
Mittl	. Ort	5.249	40.90	51.53	74.63	12.541	62.77	56.70	53.96
	, tgδ		-+0.351	2.492	-2.282	1.000	-0.017	4.632	+4.523
a,		+2.7	+9.7	+5.7	+10.2	+3.1	+10.6	-2.0	+10.8
Ъ,	b'	+0.0I	+0.87	-0.08	-+ 0.86	0.00	+ 0.85	-+0.16	<b>-</b> ⊢ 0.84

Ta	a.e	757) 31 0	<sup>1</sup> Cygni	760) 24 Vi	ulpeculae	761) α <sup>2</sup> C	apr <b>ic</b> orni	765) Y	Cygni
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	20 <sup>h</sup> 11 <sup>m</sup>	+46° 33"	20 <sup>h</sup> 14 <sup>m</sup>	+24°29′	20 <sup>h</sup> 14 <sup>m</sup>	-12°43′	20 <sup>h</sup> 20 <sup>m</sup>	+40° 3″
Jan.	I	43-284	45.00 299	12.149	18.10 228	42.782	50.00	3.436	63.13 278
	11	43.251 33	42.01 310	12.150	15.82	42.823 77	50.34	$3.411 \frac{25}{22}$	60.35 290
	21	43.271	28 OT	12.208 49	13.48	42.900 110	50.63 21	3.433 69	57.45 290
	31	43.346 75	35.80 298	12.296	11.18 217	43.010	50.84 10	3.502 115	54.55 279
Febr.	10	43.473 178	32.82 275	12.419 158	9.01 194	43.152 171	50.94	3.617 160	51.76 257
	20	43.651 225	30.07 241	12.577	7.07 163	43.323 197	50.91	3.777 202	49.19 224
März	I	43.876	27.66	12.768 220	5.44 126	43.520 222	50.72 36	3.979 240	46.95 183
	II	44.144 304	25.70	12.988 246	4.18 81	43.742	50.36	4.219	45.12
	21	44.440	24.25 87	13.234 268	3.37 35	43.986 263	49.81	4.492 202	43.79 79
	31	44.782 356	23.38 27	13.502 286	3.02 15	44.249 279	49.07 91	4.794 324	43.00 22
Apr.	10	45.138 370	23.11	13.788 298	3.17 64	44.528 292	48.16	5.118	42.78 36
	20		23.45	14.086	3.81	44.820	47.10	1 3.43/ 242	43.14 92
	30	45.883	24.38	14.301	4.91	45.119	45.91	5.802 344	44.00
Mai	IO	1 40.455 2.6	25.86	14.696	0.43 180	45.421 208	44.64	1 0.140	45.51 102
	20	40.009 332	27.84 242	14.993 283	8.32 219	45.719 287	43.32	0.481 316	47-43 233
_	30	46.941 300	30.26 277	15.276 262	10.51 244	46.006	41.99 128	6.797 290	49.76 267
Juni	9	47.241 260	33.03 305	15.538 234	12.95 260	46.277 246	40.71 120	7.087	52.43 207
	19	47.501 213	36.08 323	15.772 200	15.55 270	40.523 216	39.51	7.342	55.30 200
т э.	29	47.714 161	39-31 334	15.972 160	18.25 272	46.739 180	38.41	7.557 168	50.40
Juli	9	47.875 105	42.65 337	16.132 116	20.97 268	46.919 140	37.46 79	7.725 117	01.05 321
	19	2547.980 45	46.02 330	16.248	23.65 257	2647.059 95	36.67 62	7.842 64	64.86 315
	28	48.025	49.32 318	16.319 23	20.22	47-154 49	36.05 45	7.906 10	00.01
Aug.	7	48.012	52.50	16.342	28.04	47.203	35.60 28	7.916	71.03 282
	17	47.942	55.47	16.318	30.84	47.206	35.32	7.873	73.86
	27	47.817 174	58.18	16.250 108	32.80 168	47.165 81	35.19 2	7.780 140	76.43 227
Sept.	6	47.643 216	60.58 202	16.142	34.48	47.084 116	35.21	7.640	78.70 192
	16	47.427 250	62.60	10.000	35.85 102	46.968	35.34 23	7.401 211	So.62 154
01.1	26	47.177	04.22	15.831 780	36.88 67	40.825	35.57 30	7-250 234	82.10
Okt.	6	40.903	65.39 70	15.042	37.55 32	46.662	35.87 35	7.016 248	83.27 67
	16	46.615 292	66.09 20	15.443 200	37.87 6	40.489 172	36.22 39	6.768 252	83.94 20
7.7	26	46.323 284	66.29 32	15.243 192	37.81	46.317 163	36.61 <sub>41</sub>	6.516 246	84.14 28
Nov.	5	46.039 268	65.97	15.051	37·37 81	46.154	37.02	0.270	83.86 76
	15	45.771 241	05.14	14.875	36.56	40.008	37.44	208	83.10 123
Do-	25	45.530 206	13.01 180	14./22 121	35.39 151	45.007 gi	37.87	5.030 177	81.87 167
Dez.	5	45.324 165	62.01	14.598 90	33.88 180	45.796 56	38.31 43	5.653 141	80.20 207
	15	45.159 118	59.78 260	14.508	32.08 205	45.740 19	38.74 42	5-512 99	78.13 242
	25	45.041 68	57.18 288	14.454 15	30.03 224	45.721 17	39.16	5.413 56	75.71 269
	35	44.973	54.30	14.439	27.79	45.738	39.55	5.357	73.02
	l. Ort	44.453	30.79	12.952	6.72	43.595	55-94	4.406	49.37
	, $tg \delta$	1.454	+1.056		+0.455	1.025	-0.226	1.307	o.841
a,		+1.9	+10.9	+2.6	+11.1	+3.3	11.1	+2.2	+11.5
Ъ,	b'	+0.04	+ 0.84	+0.02	+ 0.83	-0.01	+ 0.83	+0.03	+ 0.82

Ta	a.or	764) α I	Pavonis	767) भ	Cephei	768) ε I	Delphini	770) 73 ]	Oraconis
		AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	20 <sup>h</sup> 20 <sup>m</sup>	-56° 55'	20 <sup>h</sup> 28 <sup>m</sup>	+62°47′	20h 30m	+11" 5"	20h 32m	+74°44′
Jan.	I	52.773 26	44.09 222	32.85 15	48.24 308	20.044	63.10 162	15.95 35	75.78 302
	11	52.700	41.87 235	32.70 6	45.16 328	20 055	61.48 164	15.60 35	72.76 302
	21	52.894 159	20 52	32.64	41.88	20.100	59.84	15.39 5	60 00
	31	53.053 220	27 10	32.66	38.5T 337	20.179 79	58.25	15.34	66 70 330
Febr.	10	53.273 275	34.67 243	32.77 19	35.20 314	20.291 143	56.78 147	15.45 26	62.74 338
					1				
250	20	53.548 326	32.28	32.96 <sub>27</sub>	32.06 284	20.434 172	55.50 103	15.71 41	59.50 298
März	I	1 53.074 270	29.97 217	33.23 21	29.22	20.000	54.47	10.12	56.52 260
	II	1 54 244	27.80	33.57	20.79	20.806	53.76 36	10.00 2	53.92 212
	21	54.054	25.80 179	33.98 45	24.86	21.031	53.40	17.31	51.80
	31	55.097 469	24.01	34.43 50	23.51 74	21.278 267	53.41 40	18.06 81	50.23 96
Apr.	10	55.566 489	22.46	34-93 52	22.77 10	21.545 281	53.81 <sub>78</sub>	18.87 86	49.27 22
_	20	1 50.055	21.10	35·45 <sub>52</sub>	22.67	21.826	54.59 114	19.73 86	18.05
	30	56.555 <sub>5°3</sub>	20.22	35.97 52	23.22 55	22.116 295	55.73 146	20.59 85	10.27
Mai	10		19.58	36.49 50	24.37 172	22.411 292	57.19 172	21.44 81	50.2T 9+
	20	E7 552 171	$19.38 \frac{30}{6}$	36.99 <sub>47</sub>	26.09 223	22.703 282	58.91 194	22.25 74	51.74 205
		T//	0		i				
T:	30	58.029 58.476	19.34 41	37.46 37.88 42 36	28.32 266	22.985 265	60.85 209	22.99 66	53.79 251
Juni	9	10.470	19.75 76	37.88 36	30.98 302	23.250 243	62.94 218	23.65	56.30 290
	19	58.883 407	20.51 109	35.24	34.00	23.493 213	65.12 222	24.20 55	59.20 321
Juli	29	1 59.239 207	21.60	38.53 21	37.29 248	23.706	67.34 218	24.04 20	62.41 342
Jun	9	59.536 228	22.98 164	38.74 13	40.77 358	23.883 138	69.52	24.94 17	$65.83 \frac{34^2}{356}$
	19	59.764	24.62 183	38.87 5	44.35 359	24.021	71.63 198	25.11 3	69.39 361
	28*)	59.917 75	26.45 197	38.02	47.94 353	24.116	73.61 198	25.14	73.00 358
Aug.	7	59.992 4	28.42	38.89 3	151.4/ 22=	<sup>30</sup> 24.166 6	75.43 162	25.03	76-58
	17	59.988 80	30.46	38.77	54.84 316	24.172 38	77.05 140	24.78	80.05
	27	59.908 153	32.50 194	38.58 27	58.00 288	24.134 78	78.45 116	24.40 50	83.34 329
Sept.	6					, , ,	79.61		86.25
ocpe.	16	59.755 217	34.44 177	38.31	60.88 <sub>253</sub>	24.056	80.51 65	23.90 61	86.37
	26	59.538 269	36.21 153	37.90 38	63.41 213	23.944 139	81.16	23.29 69	89.09
Okt.	6	59.269 308 58.961 331	37.74 123	37.60 42	65.54 168	23.805 160	81.55	22.60 21.83 82	91.42 190
01.00	16	58.620 331	38.97 86	37.18 45 36.72	67.22 119 68.41 66	23.645 172	81.66	21.03 82	93.32
	10	58.630 331	39.83	36.73 47	66	23.473 175	01.00	21.01 85	94.73 89
	26	58.292	40.28	36.26 46	69.07 10	23.298 169	81.52	20.16 86	95.62 34
Nov.	5	1 57.904 202	40.31 40	35.80 46	69.17	23.129	81.11	19.30 8,	95.96 24
	15	57.662 262	39.91 82	35.34	08.70	22.974	80.45 90	18.45 0	95.72 82
	25	57.400	39.09	34.92 28	107.07	22.839 110	79.55	17.64	94.89 130
Dez.	5	57.189	37.88	34.54 33	66.09 210	22.729 79	78.42	16.89 66	93.50 194
	15	WW 0.30		1	1	22 650		16.23 56	91.56 242
	25	1 56 052	36.33 185	34.21 27	63.99 254	22 604	77.10 75.61 <sub>160</sub>	15.67 44	89.14 283
	35	56.936	34.48 208	33.94 20	61-45 <sub>292</sub> 58.53	22.592	75.01 160	15.23	86.31
	- 55	30.930	1 3	33.1+	30.33		177.2	-53	
	l. Ort	54.781	44.93	34.62	31.35	20.735	53.62	19.26	57.66
	, tg $\delta$	1.833	-1.536	2.187	+1.945	1.019	+0.196	3.802	+3.668
a,		+4.7	+11.6	+1.0	+12.1	+2.9	+12.2	0.8	+12.4
b,	b'	-0.06	+ 0.82	+0.08	+ 0.80	+o.o $+$	+ 0.79	+0.15	+ 0.79

<sup>\*)</sup> Bei Stern 767), 768) und 770) lies Juli 29.

Ta	9.07	769) α	Indi	771) B De	elphi <b>ni</b> m	773) v C	apricorni	774) α I	Pel <b>p</b> hini
	ag 	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	20 <sup>h</sup> 33 <sup>m</sup>	-47°29′	20 <sup>h</sup> 34 <sup>m</sup>	+14°23′	20 <sup>h</sup> 36 <sup>m</sup>	-18°20′	20 <sup>h</sup> 36 <sup>m</sup>	+15°41'
Jan.	I	19.811	67.37	43.391 3	17.28	37.340 22	60.04	50.330	67.79 181
	II	19.828 70	65.66	43.394 39	15.52	37.362 57	60.03	50.330 35	65.98
	21	19.898	03.80	43.433 72	13.73 176	37.419 91	59.93 20	50.365	04.13 182
	31	20.018 -60	61.84	43.505 106	11.97	37.510	59.73 31	50.434	62.31
Febr.	IO	20.186 213	59.82 204	43.611 139	10.33	37.633 154	59.42 43	50.537 136	60.60
	20	20.399 254	57.78 202	43.750 168	8.88	37.787 183	58.99	50.673 167	59.08 125
März	I	20.653	55.76	43.918	7.09 87	37.970	58.42	50.840	57.83
	11	1 20.044	53.79 <sub>180</sub>	44.115	0.82	38.181	57.70 87	51.035	56.90 56
	21	[ 21.200	51.90	44.339 247	6.32 10	38.410 258	56.83 100	51.258	56.34 15
	31	21.023 379	50.13 161	44.586 267	6.22 30	38.674 277	55.83 112	51.505 267	56.19 27
Apr.	10	22.002 398	48.52 143	44.853 282	6.52	38.951 <sub>293</sub>	54.71 123	51.772 283	56.46 <sub>68</sub>
	20	22.400	47.09 120	45.135 202	7.24	39.244	53.48	52.055	57.14 108
	30	22.812	45.89 96	45.428	8.34	39.549	52.19	52.348 208	58.22
Mai	10	23.229	44.93 68	45.725	9.78	39.800	50.80 122	52.646	59.66
	20	23.644 403	44.25 38	46.019 286	11.53 199	40.171 303	49.54 127	52.942 287	01.41
	30	24.047 383	43.87	46.305 269	13.52 216	40.474 289	48.27 118	53.229 271	63.42
Juni	9	24.430	$43.80 \frac{7}{23}$	46.574 246	15.68	40.763	47.09 105	53.500 247	65.61
	19	24./03 214	44.03 55	46.820 216	17.97	41.031	46.04 91	53.747 218	07.94 220
	29	25.097 267	44.58 84	47.036	20.31	41.270	45.13 73	53.965 182	70.33
Juli	9	25.364 212	45.42 110	47.216	22.64 227	41.475 164	44.40 54	54.147 142	72.72 233
	19	25.576	46.52	47.357 97	24.91 215	41.639 120	43.86	54.289	75.05 222
	29	25.727 87	47.84	47.454 53	27.06	41.759 72	43.52	31 <sup>54</sup> ·388 53	77.27 207
Aug.	7	25.814 22	49.34 161	47.507 7	29.06	41.832	43.36 =	54.441 8	79.34 187
	17	25.836	50.95 167	47.514 36	30.86	41.857	43.38 18	54·449 <sub>35</sub>	81.21
	27	25.794 102	52.62 165	47-478 77	32.43	41.836 64	43.56	54.414 76	82.86
Sept.	6	25.692	54.27	47.401	33.76 106	41.772 103	43.87	54.338 112	84.25
	16	25.537	55.84	47.289	34.82	41.669	44.28 48	54.226	85.38 85
	26	25.337 222	57.25	47.149 161	35.61	41.535 16	44.76	54.086 <sub>161</sub>	86.23
Okt.	6	25.104	58.44 93	46.988	36.11	41.379	45.27 52	53.925 175	80.78
	16	24.850 261	59·37 <sub>61</sub>	46.815	36.32 8	41.209 174	45.79 50	53.750 178	87.03
	26	24.589 256	59.98 26	46.638	36.24 37	41.035 169	46.29	53.572	86.98
Nov.	5	24.333	60.24 8	40,405	35.87 65	40.866	46.74	53.398 162	86.64 65
	15	24.096	60.16	40.305	35.22	40.711	47.15 34	53.236	85.99
70%	25	23.890 167	59.72	40.105	34.29 118	40.578 105	47.49 27	53.093 118	85.00
Dez.	5	23.723 121	58.95 107	46.050 86	33.11	40.473 73	47.76	52.975 <sub>89</sub>	83.87
	15	23.602 69	57.88	45.964 53	31.71 159	40.400 38	47.97	52.886	82.44 163
	25	23.533 17	56.53 156	45.911	30.12	40.362	48.10	52.829 22	80.81
	35	23.516	54.97	45.892	28.39	40.360	48.16	52.807	79.03
Mittl		21.298	68.04	44.070	7.21	38.161	64.41	51.003	57.47
sec δ,	_	1	-1.091		+0.257	1.054	-0.332	1.039	+0.281
a, b,		+4.2	+12.4		+12.5	+3.4	+12.7	+2.8	+12.7
υ,	U	-0.05	+ 0.78	+0.01	+ 0.78	-0.01	+ 0.78	+0.01	+ 0.77

K 40

Ta	ıo	777) ∝	Cygni	775) β I	Pavonis	780) ε	Cygni	783) n	Cephei
	*5	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	20 <sup>h</sup> 39 <sup>m</sup>	+45° 3′	20 <sup>h</sup> 39 <sup>m</sup>	-66° 24'	20 <sup>h</sup> 43 <sup>m</sup>	+33°44′	20 <sup>h</sup> 44 <sup>m</sup>	+61°36′
Jan.	I	22.147 62	69.74 278	31.64	75.58 263	46.151 34	54.09 246	2.78 16	36.72 294
	II	22.085 12	06.90	31.60	72.95 281	$46.117 \frac{34}{6}$	51.63 259	2.62 9	33.78 317
	21	22.073 38	04.00	31.65 5	70.14	46.123 48	49.04 261	2.53 0	30.61 31/
	31	22.111 90	00.99 204	31.79	67.24	46.171 89	46.43	2.53	27.32 329
Febr.	10	22.201 140	58.05 277	32.02 32	64.31 290	46.260 130	43.90 236	2.60 16	24.04 314
	20	22.341 188	55.28	32·34 <sub>38</sub>	61.41	46.390 169	41.54 207	2.76	20.90 287
März	1	22,520	52.81	32.72	50.02 262	46.559	39.47	2.99	18.03 250
	II	22.702	50.73 161	33.17	50.00	46.764	37.77 126	3.30 27	15.53 202
	21	1 23.035 <sub>208</sub>	49.12	33.00 56	53.58 <sub>215</sub>	47.004 260	36.51	3.0/ 42	13.51
	31	<sup>2</sup> 3·343 <sub>336</sub>	48.05 49	34.24 <sub>60</sub>	51.43 185	47.273 294	35.74 23	4.09 47	12.04 87
Apr.	10	23.679 356	47.56	34.84 <sub>64</sub>	49.58	47.567 313	35.51 30	4.56 5.06 51	11.17 24
	20	1 24.035	47.66 68	35.48 <sub>65</sub>	48.08	1 47.880	35.81 82	5.06 51	10.93
~ .	30	24.403	48.34 124	36.13 66	46.94 74	40.205	36.63	5.57 51	11.33
Mai	10	44.113	49.58 <sub>176</sub>	36.79 <sub>65</sub>	40.20 32	40.535 326	37.95	0.00	12.34 159
	20	25.130 346	51.34 221	37.44 64	45.88 10	48.801 314	39.72 217	6.57 47	13.93 211
	30	25.482	53.55 259	38.08 <sub>60</sub>	45.98 52	49.175 295	41.89 249	7.04 42	16.04 256
Juni	9	25.002 286	56.14 200	38.68	46.50	49.470 267	44.38	7.46	18.00
	19	26.088	59.04	39.23 48	47.42	49.737 233	47.12	7.04	121.54
~	29	20.33T	02.17	39.71	48.74 166	49.970	50.03	0.15 24	1 44.10
Juli	9	26.526	05.44 334	40.12	50.40 196	50.162 146	53.04 304	8.39 17	28.23 345
	19	26.668 86	68.78 331	40.44 23	52.36 219	50.308 98	56.08	8.56 8	31.81 362
	29	20.754 28	72.09 323	40.67	54.55	50.406 47	56.08 300 59.08 288	8.64	35.43 258
Aug.	7	26.782	75.32 206	1 40.79 2	50.90	250.453 = 3	61.96	8.64 0	39.01 216
	17	20.753	78.38 282	40.81	1 59.34	50.450 51	64.67	8.56	42.47
	27	26.669	81.23 256	40.72 19	61.78	50.399 97	07.15 221	8.41	45.74 301
Sept.	6	26.535 179	83.79 223	40.53 27	64.11	50.302	69.36 189	8.18 28	48.75 269
	16	1 20.350	86.02 184	40.26	00.27	50.166	71.25	7.90 34 7.56 39	51.44 231
	26	20.141	87.80 142	39.90	68.15	49.998	72.80 116	7.56 39	53.75 187
Okt.	6	45.09/ 264	89.29	39·49 <sub>46</sub>	69.67	49.804	73.96 76	7.17	55.62
	16	25.033 272	90.26 49	39.03 47	70.78 64	49.594 217	74.72 33	6.75 <sub>43</sub>	57.01 88
	26	25.361 270	90.75 。	38.56	71.42	49.377 216	75.05 10	6.32 5.88 44	57.89 33
Nov.	5	25.0QI	90.75	38.09	71.55 28	49.161	74.95	12	58.22
	15	24.831	90.24	37.04	71.17 88	48.955 187	74.41 <sub>98</sub>	5.45	57.98 8r
	25	24.590 213	89.23	37.23	70.29 126	40.700 162	73.43 130	5.04 27	57.17 137
Dez.	5	24·377 <sub>178</sub>	87.73	36.88 35 27	68.93 178	48.605 133	72.04 176	$4.67\frac{37}{33}$	55.80 189
	15	24.199 138	85.78 234	36.61 <sub>18</sub>	67.15 216	48.472 98	70.28	4.34 27	53.91 236
	25	24.061 94	83.44 265	36.43 <sub>10</sub>	64.99 245	48.374 60	68.18 236	4.07 21	51.55 276
	35	23.967	80.79	36.33	62.54	48.314	65.82	3.86	48.79
Mittl	. Ort	23.096	54.49	34.57	74-34	46.899	40.48	4.30	19.11
sec δ,			+1.002	2.500	-2.291	1.203	+0.668	2.103	+1.850
a,			+12.8	+5.4	+12.9		+13.1	+1.2	+13.2
b,	b'	+0.04	+ 0.77	-0.10	+ 0.77	+0.03	+ 0.76	+0.08	+ 0.75

т,	ag	781) ε	Aquarii	784) λ	Cygni m	785) [	3 Indi	786) 32 V	ulpeculae
17	a.g 	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	20 <sup>h</sup> 44 <sup>m</sup>	-9° 42′	20 <sup>h</sup> 45 <sup>m</sup>	+36°16′	20h 50m	-58° 40'	20 <sup>h</sup> 51 <sup>m</sup>	+27°49′
Jan.	I	25.020	54.05	2.208	22.72	6052		50.404	FF 24
oun.	II	1 11	54.25 48	3.398 42	23.73 254	6.053 32	57.17 224	59.404 31	55.24 223
	21	25.031 46	54.73 41	3.356	21.19 267	$\begin{array}{c c} 6.021 & \frac{32}{38} \\ 6.070 & \frac{32}{38} \end{array}$	54.93 244	59.373 6	53.01 234
	31	25.077 <sub>78</sub> 25.155 <sub>109</sub>	55·14 33 55·47 31	3·356 3·399 85	18.52 271 15.81 265	6.059 105 6.164 169	52.49 257	59·379 44 59·423 82	50.67 236 48.31 228
Febr.	10	25.264 139	HH 68	3.484 <sub>128</sub>	15.81 13.16 246	6 222	49.92 263		46.03 215
			55.00 6				47.29 265	59.505 119	
3.5.0	20	25.403 167	55.74 12	3.612	10.70 218	6.564 287	44.64 260	59.624 156	43.92 184
März	I	25.570	55.62	3.782	8.52	0.851	42.04 250	59.780	42.08
	II	25.765	55·31 53	3.989 243	0.71	1.190 287	39.54 235	59.970	40.58 108
	21	25.985 244	54.78 74	4.232 274	5.34 86	1:0// 10-	37.19 217	60.192 251	39.50 62
	31	26.229 264	54.04 95	4.506 300	4.48 32	8.004 463	35.02 193	00.443 277	38.88
Apr.	10	26.493 280	53.09 113	4.806 319	4.16	8.467	33.09 165	60.720	38.74 36
	20	20.773	51.96	5.145 222	4.39	0.957	31.44	01.015	39.10 85
	30	27.066	50.67	5.43/ 226	5.16	9.400	30.10	1 01.324	39.95 122
Mai	10	2/.500	49.25	1 5./04	6.44	9.989	29.10	01.040	41.27 172
	20	27.667 295	47.76	0.120 320	8.18 216	10.510 510	28.46 25	61.955 306	42.99 208
	30	27.962	46.24 151	6.446	10.34	11.020	28.21	62.261	45.07 237
Juni	9	28.243	44.73	0.740 202	12.84	11.507	28.35	02.550	47.44 260
	19	28.505	43.29	7.018 235	TE OT	11.959	28.88 53	62.815	50.04 274
	29	28.740	41.94 121	7.253 194	1 10.50	12.364 248	29.78	63.049	52.78 282
Juli	9	28.941 163	40.73 105	7.447 148	21.63 307	12.712 281	31.02 156	63.246	55.60 283
	19	29.104 121	39.68 87	7·595 <sub>97</sub>	24.74	12.993 207	32.58 182	63.401 108	58.43 278
	29	29.225 76	38.81 68	7.692 46	2/.01	13.200 126	34.40 201	63.509 60	01.21 266
Aug.	7	29.301 30	38.13	7.738 6	30.78 279	<sup>4</sup> 13.326 44	36.41 214	<sup>4</sup> 63.569 <sub>13</sub>	03.87
	17	29.331 15	37.64 31	7.732 -6	33.57 728	13.370 39	38.55 218	63.582	00.35
	27	29.316 57	37.33 13	7.676	36.15 231	13.331 117	40.73 215	63.548 34	68.62 200
Sept.	6	20.250	37-20	7.575 142	38.46	13.214 189	42.88	63.470 116	70.62 170
-	16	20 166 93	27 22	7·433 <sub>176</sub>	40.44 163	13.025 251	44.91 183	63.354	72.32 138
	26	20.042	37.38 26	7.257 202	42.07 123	12.774	46.74	63.205 173	73.70 103
Okt.	6	28.895 160	27.64	7.055 219	43.30 83	12.475	48.28 119	03.032	74.73 66
	16	28.735 166	37.99 <sub>42</sub>	6.836 227	44.13 38	12.142 333	49.47 79	62.843	75.39 27
	26	28.569	28 47	6.609 225	44.51	11.702	50.26	62.646	75 66
Nov.	5	28.407	20 00 40	6.384 216	11.11	11.444	50 6T 33	02.440	BE EA
	15	28.258	20.40	6.168	12.03	11.100 302	FO FO 11	62.262	75.02
	25	28.128	20.02	5.970 173	42.95	10.807 302	49.94 100	62.091 171	74.12 127
Dez.	5	28.023 76	40.48 56	5.797 143	41.55 180	10.549 203	48.94	61.942	72.85 162
	15	27.047		5.654 108	39.75 215	10.346		61.821	
	25	27 004	41 60	5.546 69	37.60	10.205 74	47·54 <sub>176</sub> 45·78 <sub>206</sub>	61 721	71.23 <sub>190</sub> 69.33 <sub>215</sub>
	35	27.894	42.12	5.477	37.60 35.18	10.131	43.72	61.676	67.18
Mittl.	Ort	25 740	TO 84	4.168	9.66			60.061	
sec δ,		25.740 1.015	59.84		+0.734	8.150	55·57 —1.644		42.50 +0.528
$a, \epsilon$			-0.171 12.2	1.240				,	+13.7
b, 1		_	-	+2.3 +0.03	+13.2 + 0.75		+13.5 + 0.74		÷ 0.73
,			0./5	. 5.53	. 5.75	0.07	/-	K* 40	13

Ta 194 Jan.		AR.	Dekl.	4 D				4 D	
			DCKI.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
Jan.	40	20h 54m	-⊢40° 56′	20 <sup>h</sup> 59 <sup>m</sup>	-38° 51'	21 <sup>h</sup> 4 <sup>m</sup>	+38° 27′	21 <sup>h</sup> 6 <sup>m</sup>	-11°36′
o wii.	I	55.282 65	22.54 259	7.129	61.33 118	11.557 54	26-99 240	18.955	52.19
	11	017	19.95	7.120	60.15	TT 502	24.59 257	T8.048 -	52.54
	21	EE 106	17.18 284	7.154	58.80	TT 40T -	22.02 263	T8 072	52.8T
	31	EE 220	14.34 280	7.231 77	57.30 162	TT 500	19.39 260	TO 000	52.98
Febr.	10	55.291 118	11.54 264	7.348 117	55.68	11.522 75	16.79	19.029 88	E2 02
1 0.01.	10								11
	20	55.409 163	8.90 238	7.504 192	53.98 177	11.717 163	14.34 220	19.235 149	52.91 29
März	I	55.572 206	0.52	7.696	52.21 181	11.880	12.14 .0.	19.384	52.62 47
	II	55.778 245	4.50 158	7.924 260	50.40 181	12.084	10.29	10.561	52.15 68
	21	50.023 281	2.92	8.184	48.59	12.3270	8.87	19.765	51.47 88
	31	56.304 310	1.85 52	8.474 316	46.81 173	12.605 308	7.95 39	19.996 254	50.59 107
Apr.	10	56.614 333	1.33	8.790 <sub>339</sub>	45.08 163	12.913 330	7.56	20.250 274	49.52 125
	20	56-947 333	T 27 4	9.129 356	43.45	13.243 347	7.7T <sup>^3</sup>	20.524 290	48.27 138
	30		T 08	9.485 367	41.95	T2 500	8 42	20.814 301	46.89 149
Mai	10	57.648 354	3.13 165		40.62	13.945 353	0.66	21.115 305	45.40 155
	20	57.999 339	4.78 210	TO 222		14.298 353	11.38 216		43.85 156
		37 339 339		300	- 09	344		302	
	30	58.338 319	6.88	10.588	38.60 63	14.642 326	13.54 253	21.722 293	42.29 154
Juni	9	50.05/ 200	9.35 200	10.941	37.97 34	1 14.900 208	10.07 .0.	22.015 276	40.75
	19	58.947	12.13	11.2/3 201	37.63 6	15.266	18.89	22.291 251	39.30
	<b>2</b> 9	59.199	15.14	11.574 262	37.57	15.530 222	21.95 218	22.542	37.90
Juli	9	59.408 161	18.29 315	11.836 217	37.81 51	15.752 176	25.11 325	22.762 184	36.76
	19	59.569 108	21.52	12.053 167	38.32	15.928 126	28.36	22.946	25 75
	29	59.677	21.52 24.74 314	12.220	20.00	16.054	31.60 324	22.088	24.02
Λug.	7*)	59.730	27.88	T2.22T	10.08	16 707	24 77	23.185	24.2T
	17	59.730	30.88 300 30.88 279	12.385	41.25	T6 T47 -	34·77 <sub>301</sub> 37·78 <sub>281</sub>	302027	22.00
	27	59.677	32 67	12.382	41.25 131 42.56 137	T6 TT6	40.50	22 242	33.69
	/		33.67 252	37		/9	40.59 255	23.243 36	33.09 4
Sept.	6	59.575 146	36.19 221	12.325 106	43.93 138	16.037 122	43.14 225	23.207 76	33.65
	16	59.429	38.40 ,86	12.219 148	45.31	15.915 158	45.39	23.131	33.78 26
	26	59.246	40.26	12.071 .8.	40.03	15.757 186	47.29	23.022	34.04 36
Okt.	6	59.035	41.72	11.890	47.84	15.571	48.80	22.888	34.40
	16	58.803 232	42.75 58	11.686	48.88 82	15.364 218	49.89 66	22.736 160	34.84 49
	26		12.22		40.50	15.146 221	50.55	22.576 160	
Nov.	5	58.561 58.317 236	43.33 10	11.472 <sub>215</sub> 11.257 <sub>203</sub>	50.26	14.925 213	50.55 21 50.76 26	22.416	35.33 35.86 53
1101.		58.081	43.43 38	11.25/ 203	10 EE 29	14.925 213		22.410	36.40
	15		43.05 86	11.054 182	50.55	14.712 199	50.50 73	22.264 136	36.94
Dez.	25 5	57.860 197 57.663 168	42.19	10.872	50.55 28	14.513 178	49.77	114	27 46
DOZ.	3	37.003 168	40.87 176	10.719 117	50.27	14.335 150	48.60 159	22.014 89	37.40 50
	15	57.495 132	39.11	10.602 78	49.72 80	14.185 117	47.01	21.925	37.96
	25	57.363	36.97 247	10.524 26	48.92	14.068 81	45.04 226	21.866	38.42
	35	57.269	34.50	10.488	47.88	13.987	42.78	21.839	38.83
Mitt	l. Ort	56.052	7 20	8 274	61.35	12.248	12.24	19.626	56.75
	$\delta$ , tg $\delta$	56.053 1.324	7·39 -+o.867	8.274 1.284	-0.806	1.277	+0.794	1.021	_0.206
	a'	+2.2	•				+14.4		-0.200 +14.6
b,		+0.04	+13.9 + 0.72	+3.8 -0.04	+14.I + 0.71	+2.3 + 0.04	+ 0.69	+3.3 -o.or	+ 0.69

<sup>1)</sup> Die jährliche Parallaxe (0.300) ist bereits berücksichtigt.
\*) Bei Stern 794) lies Aug. 8.

Ta	a or	795) Br	2777 Ceph	797) ۲	Cygni	800) ∝ ]	Equulei	803) α	Cephei
	45	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	21h 6m	+77° 52'	21h 10m	+29° 58′	21h 12m	+4° 59′	21h 17m	+62° 19′
Jan.	I	40.66	81.04 268	22.256	61.35 220	48.906	63.66	7.70 23	70.44 268
	11	40.07 59	78.36 302	00.004	59.15	48.885	62.46	7·47 23	67.76 299
	21	20.65	75.34 325	22 T88 —	56.81 239	48.805	61.27		64.77 319
	31 -	20.42	72.09 335	22 210	54.42 235	48.936 72		7.25	
Febr.	10	30.28	68.74 335	22.270	52.07 235	49.009 73	FO 07	7.06	ES 21 34/
		-3	332	99				9	
März	20	39.53 35	65.42	22.369 137	49.87	49.112	58.19 67	7.35 18	55.10 303
Marz	I	39.88 54	286	22.506	47.90 164	49.246 163	57.52 41	7.53 25	52.07 273
	II	40.42 69	59.41 247	22.680 210	46.26	49.409 193	57.11 12	7.78 33 8.11 33	49.34 232
	21	41.11 83	56.94 198	22.890 242	45.01 79	49.602 220	56.99 =	8.11	47.02 182
	31	41.94 94	54.96 142	23.132 270	44.22 30	49.822	57.20 53	8.50 45	45.20 126
Apr.	10	42.88	53·54 81	23.402	43.92 20	50.066 265	57.73 85	8.95 48	43.94 65
	20	43.90 106	52.73 18	23.696	44.12	50.331 282	58.58 116	9.43	43.29 4
	30	44.96	52.55	24.007 311	44.82	50.613	59.74	9.95	43.25
Mai	10	46.03 104	52.99 104	24.32/ 323	45.99 160	50.906	01.17	10.47	43.84 118
	20	47.07 98	54.03 161	24.650 317	47.59 199	51.204 295	62.82	10.99 51	45.02 173
	30	48.05	55.64 213	24.967 303	49.58 232	51.499 285	64.64	11.50	46.75 223
Juni	9	48.95 78	57.77 257	25.270 281	51.90 256	51.784 269	00.59	11.97 43	48.98 266
	19	49.73 65	60.34	25.551 251	54.46 275	52.053 245	68.60		51.64 301
	29	50.28	03.28	25.802	57.21 286	52.298 214	70.01	12.77	54.65 329
Juli	9	50.89 34	66.53 346	26.017 173	60.07 290	52.512 178	72.58 188	13.08 23	57.94 348
	19	ET.22	69.99 359	26.190 128	62.97 286	52,600	74.46		61.42 359
	29	ET.40 1/	73.58 359		65.83 278	52.827	76.21 158	13.31 13.46 8	65.01 362
Aug.	8	ET.40	77.22	26 208	68.61 262	F2.022 93	77.70	T2 54	68.63 362
	17	51.23	80.84 351 84.25	26,420	71.23 243	7 2 072	77.79 138 79.17	T2.53	72.20
	27	50.00	84.35 333	26 412	73.66 218	52.078	1 80.34	13.44	75.64 344 323
α ,		49	333	UA	i	3-	95		
Sept.	6	50.41 63	87.68 308	26.350 102	75.84 188	52.942 73	81.29 72	13.27 23	78.87 297
	16	49.78 76	90.70 277	20.248	77.72 157	52.869 105	82.01	13.04 30	81.84 264
01-4	26	49.02 86	93.53 228	26.111 164	79.29 122	52.764 130	82.51 28	12.74 34	84.48
Okt.	6	48.16 96	95.91 195	25.947 184	80.51 85	52.634 148	82.79 6	12.40	86.72
	16	47.20 102	97.86	25.763 194	81.36 46	52.486	82.85	12.01 41	88.52
	26	46.18 106	99.31	25.569 198	81.82 6	52.329 158	82.70	11.60 43	89.83 78
Nov.	5	45.12	100.22 35	25.371 192	81.88	52.171	82.36	1 11.17	90.61 21
	15	44.05 105	100.57		81.53	52.020 138	81.83 53	10./3	0
	25	43.00 100	100.32	24.999 760	80.78	51.882	81.12	1 10.31 40	90.82 36 93
Dez.	5	42.00 93	99.48 142	24.839 136	79.63 150	51.763 96	80.26	9.91 37	89.53 149
	15	47.07	98.06	24.703 108	78.13 183	ET 667	79.26	9.54 32	88.04 201
	25	40.25	96.09 245	24.595 75	76.30 209	51.508	78.15	9.22 26	86.03 246
	35	39.55	93.64	24.520 75	74.21	51.557	76.96	8.96	83.57
Mitt	l. Ort	_	<u> </u>	0	00			0.0	
	$t$ , $tg \delta$	43.99	60.77	22.827	47.88	49.450	55.64	8.85	51.23
	a'	4.764	+4.658	1.155	+0.577	1.004	+0.088	2.154	+1.907
b,		-1.2 +0.23	+14.6	+2.6	+14.8	+3.0	+14.9 + 0.67	+1.4	+15.2
υ,		1 10.23	+ 0.69	+0.03	+ 0.67	0.00	+ 0.67	+0.10	+ 0.65

m,	ag	804) 1	Pegasi	805) y I	Pavonis	806) ζ Ca	apricorni	809) ß	Cephei
	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	21 <sup>h</sup> 19 <sup>m</sup>	+19° 32′	21 <sup>h</sup> 21 <sup>m</sup>	-65° 37'	21h 23m	-22°39′	21h 27m	+70° 17"
Jan.	1	18.111	60.16	27.85	85.93 244	13.937 24	78.62	52.06 37	70.41 256
	II	18 060 44	58.37 187	27.71	83.49 271	T2.012	78.27	51.69 37	67.85 292
	21	18 060	56.50 190	27.66	80.78	T2.022	77.07	51.42	64.93 317
	31	18.081	54.60 183	27.70 4	77.86 303	12.066 43	77.42	ET 25	
Febr.	10	TS TAT 3/	52.77 183	27.81	74.83 303	T4.04T /3	76 75	77.00	58.46
		92				****	- T	7	330
3.5	20	18.233 126	51.08 146	28.01 28	71.74 307	14.149	75.91 99	51.27 18	55.16 318
März	I	18.359	49.62	28.29 34	08.07	14.289 171	74.92 112	51.45 30	51.98 201
	11	18.518	48.46 81	20.03	05.00	14.460 201	73.80 126	51.75 41	49.07 255
	21	18.710 222	47.65	29.04	62.84 265	14.661 231	72.54 139	52.10	46.52 208
	31	18.932 249	47.24 1	29.51 47	60.19 239	14.892 257	71.15 148	52.66 57	44.44 154
Apr.	10	19.181	47.25 44	30.04	57.80 208	15.149 280	69.67	53.23 64	42.90 94
	20	1 19.454	47.69	30.61 60	55.72	15.429	09.11	53.87 67	41.96 33
	30	10.711	48.56	31.21 62	53.98 136	15.729	00.52	54.54 70	$41.63 \frac{33}{30}$
Mai	10	20.047	49.83 162	31.83 63	52.62	10.042	04.93	55.24 69	41.93
	20	20.354 304	51.45 192	32.46 63	51.68 94	16.364 322	63.39	55.93 67	42.85
	30	20.658	53.37 218	33.09 62	ET TQ	16.686	61.94 132	56.60 63	44.34 201
Juni	9	20.952 276	55.55 <sub>236</sub>	33.71 58	51.12	17.001 299	60.62	57.23	46.35 248
0 0	19		57.91 <sub>248</sub>	34.29	ET ET 39	17.300 277	59.47	57.23 57	48.83 288
	29	27 478 450	60.20	34.82		17.577 247	58.53	57.80 49 58.20	51.71
Juli	9	21.696 181	60.39 253	34.02 46	52.35 124	17.824 210	E7 80	58.29 40	51.71 320
01112	9	22.090 181	62.92 252	34.82 46 35.28 40	53.59 162		37.00 48	58.69 31	54.91 343
	19	21.877	65.44 245	35.68 30	55.21 194	18.034 167	57.32	59.00 21	58-34 360
	29	22.010 01	67.89 224	35.90 21	57.15 220	18.201	57.08	59.21 9	61.94 367
Aug.	8	22.110	70.23	36.19 11	59.35 228	18.322	57.08	59.30 -	65.61 366
	17	22.159 3	72.40	36.30	61.73	18.395 25	57.30 41	59.29 12	69.27
	27	$22.162 \frac{39}{39}$	74.36 173	36.31 -9	64.20 248	18.420 22	57.71 <sub>58</sub>	59.17 22	72.84 357
Sept.	6	22,123	76.09 147	36.22	66.68	18.398 65	58.29	58.95 31	76.26 319
	16	22.044	77.56 147	36.03 28	09.00	18.333 102	58.99 78	58.64 40	79.45 288
	26	21.932 138	mQ m4	35.75 34	71.28 193	18.231	59.77 82	58.24 47	82.33 252
Okt.	6	1 21.794	79.61	35.41 40	73.21 156	18.099	60.50	57.77 47 54	84.85 209
	16	21.637 169	80.18 57	35.01 44	74.77	17.946 166	61.40	57·23 54 58	86.94 161
	26	21.468	80.43		75.01	17.780 169	62.16	56.65 <sub>61</sub>	
Nov.	5	21.297 167	80.36	34.57 45	75.91 66 76.57 14	17.700 169	62.83	56.03 61	88.55 109
1101.	5 15	21.120	79.96	34.12 45	1	17.611 163		56.04 <sub>62</sub>	89.64 51
	-	21.130 156		1 33.00/ 12		17.448	63.40 45	55.42 <sub>62</sub>	
Dez.	25 5	20.974 <sub>138</sub> <sub>20.836</sub> <sub>117</sub>	79.25 101 78.24 128	33.25 39 32.86 32	76.33 <sub>90</sub> 75.43 <sub>138</sub>	17.298 17.168	63.85	54.80 59	90.08 66 89.42 <sub>125</sub>
						105	10	54.21 56	1
	15	20.719 90	76.96	32.54 26	74.05 182	17.063	64.31	53.65	88.17 181
	25	20.629 61	15.43 171	32.28 18	72.23 222	16.988	64.32	53.15 42	86.36 231
	35	20.568	73.72	32.10	70.01	16.944	64.19	52.73	84.05
Mittl	l. Ort	18.603	48.87	30.55	81.25	14.684	80.19	53.60	49.84
	$tg \delta$	1.061	±0.355	2.424	-2.208	1.084	-0.418	2.966	+2.792
	a'	+2.8	+15.3	+5.0	+15.4	+3.4	+15.5	+o.8	+15.8
<i>b</i> ,		+0.02	+ 0.65	-0.11	+ 0.64	-0.02	+ 0.63	+0.15	+ 0.62

Т:	ag	8ο8) β	Aquarii	811) 74	Cygni	810) v (	octantis	815) E	Pegasi
	~~ <u>~</u>	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	21h 28m	-5° 49′	21h 34m	+40° 8′	21 <sup>h</sup> 34 <sup>m</sup>	-77°38′	21 <sup>h</sup> 41 <sup>m</sup>	+9° 35′
Jan.	I	23.523 27	64.76	31.978 101	51.96 230	47.40	96.12 279	13.887 46	65.42
	II	$23.496 \frac{27}{2}$	65.30	A T Q M M	49.66 252	47.00	93.33 310	13.841 19	64.12
	21	22.408	65.06	31.814 63	47.14 266	46.76	90.23	T2 822	62.77
	31	22 520	66 15 49	27 702	44.48 269	16.60		T2 822	61.44
Febr.	10	23.591 62	66.81	31.815 67	41.79 261	46.79 26	83.46 345	13.874 73	60.19
	20	23.683	67 OT	31.882					59.08
März	1	23.806	67.02	31.996 160	39.18 36.76	47.05 42 47.47 56	79.97 345	13.947 <sub>104</sub> 14.051 <sub>137</sub>	E8.T8 95
	II	23.959 182	66.8T	22 TEO	24.62	18 02	76.52 334 73.18 315	14.188 169	57.52
	21	24.141	66 26 45	32.359 <sub>244</sub>	22 88 1/3	18 70	70.02	14.100 169	C7 T8 33
	31	24.141 210	65.67	32.603 281	31.58		70.03 289	14.357 200	57.16 2
	31	24.351 237	93		31.30 79	49·54 <sub>92</sub>	67.14 259	14.557 228	37.10
Apr.	10	24.588 260	64.74 115	32.884 312	30.79 26	50.46 <sub>101</sub>	64.55 222	14.785 254	57.49 69
	20	24.848 279	63.59 136	33.190	30.53 28	51.47 107	62.33 181	15.039 275	58.18 103
3.5 .	30	25.127 293	02.23	33.530	30.81 83	52.54 112	60.52	15.314 290	59.21
Mai	10	25.420 300	00.70 164	33.880	31.64 133	53.66	59.16 <sub>88</sub>	15.604 299	60.55 161
	20	25.720 302	59.06	34.236 <sub>353</sub>	32.97 180	54.80	58.28 38	15.903 301	62.16
	30	26.022	57-34 175	34.589 340	34.77 220	55-94 111	57.90 12	16.204 296	64.00 201
Juni	9	20.317 281	55.59 172	34.929	36.97 254	57.05 105	58.02	16.500	66.01
	19	26.598	53.86 161	35.248 288	39.51 282	58.10 97	58.64	10.783 261	68.13 218
	29	26.857	52.22	35.536	42.33 302	59.07 85	59.75 7.6	17.044	70.31
Juli	9	27.088	50.69 139	35.787 206	45.35 313	59.92 73	61.31 197	17.278 200	72.48
	19	27.285 157	49.30	35.993 158	48.48 319	60.65	63.28	17.478 161	74.60 202
	29	27.442	48.10 100	36.151 105	51.67 316	61.22	65.60 258	17.639	76.62 187
Aug.	8	27.557	100	20,250	54.83 306	61.61 39	68.18 278	T7 750	78.49 169
	17	27 627	16 22	1526.208	57.89 291	61.82 21	70.96 287	17 824 /3	80.18
	27	27.652 25	45.74 <sub>37</sub>	36.308	60.80 270	$61.84 \frac{2}{17}$	73.83 287	17.866	81.66 148
Sept.	6	27.625	15.27	36.258	63.50 242	67.67	76.70 275	T7 855	82.02
	16	27.578	45.20	26 TGT 9/	65.92 212	61 21 30	79.45 252	77 801	82 04
	26	27 488	45 20	26.022	68 04	60.70	81.97	17 720	84.72
Okt.	6	27 270	15.26	25 852	6-0-1/0	60.12	84.18	T7 608	85 25 33
	16	27 222	15.65	35.655 214	71.16	59·33 <sub>87</sub>	85.97 130	17.475	85.53
	26	1	7		94	-/	1	1	
Nov.	26	27.082	46.05 50	35.441 224	72.10 49	58.46	87.27 88.02 75	17.328	85.57
1404.	5	26.929 148	46.55 56	35.217 225	72.59 2	57.53 93 56.60 or	88.18 -	17.175	85.38
	15	26.781	47.II <sub>62</sub>	34.992 218	72.61 45			17.024 143	84.97 64
Dez.	25 5	26.524	47.13 66	34·774 <sub>204</sub> 34·570 <sub>183</sub>	72.16 91 71.25 137	55.69 85 54.84 75	87.75 103 86.72 159	16.881 130 16.751 111	84.33 83 83.50 101
_ 021	J	99	40.39 69			54.04 75			
	15	26.425 74	49.08 69	34.387 156	69.88	54.09 63	85.13 209	16.640 89	82.49 116
	25	26.351 46	49.77 68	34.231 125	68.11	53.46	83.04 253	16.551 64	81.33
	35	26.305	50.45	34.106	65.98	52.97	80.51	16.487	80.06
	l. Ort	24.068	69.93	32.462	35.98	53.06	89.69	14.291	56.68
sec 8	, $tg \delta$	1.005	-0.102	1.308	+0.843	4.679	-4.570	1.014	+0.169
a,		+3.2	+15.8	+2.4	+16.1	-+6.7	+16.2	+2.9	+16.5
Ъ,	b'	-0.01	+ o.61	+0.05	+ 0.59	-0.25	+ 0.59	+0.01	+ 0.57

		819) & Caj	pricorni 1)	821) π <sup>2</sup>	Cygni	822) γ	Gruis	823) 16	Pegasi
T	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	21h 45m	-16° 23′	21 <sup>h</sup> 44 <sup>m</sup>	+49° 1′	21h 50m	-37°38′	21h 50m	+25°38′
Jan.	ı	43.284 28	59.63	33.911	70.67 235	17.156	55.47	19.451 76	44.37 183
	II	43.246 8	50.72	22 762 149	68.32 265	17 OOT	54.52 121	TO 275	42.54 198
	21	12 228 =	50.7T	33.656	65.67 284	17.064	53.31 <sub>142</sub>	TO 220	40.56
	31	12 250	50.54	33.599 5	62.83 293	TE 054	51.89 162	TO 215 -	38.49 205
Febr.	10	43.259 52 43.311 83	59.22 49	$33.594 \frac{5}{49}$	59.90 289	17.074 48	50.27	19.336 21	36.44 196
	20	43.394 115	58 72	33.643 105	57.01 <sub>275</sub>	17.208 124	48.48 191	TO 202	34.48 178
März	1	43.509 146	58.07 84	33.748 161	54.26 249	17.332 162	46.57 202	TO 485 93	32.70
	11	43.655	57.23 103	33.909 214	51.77 212	17.494 200	44.55 209	19.616 168	27 70
	21	43.832 207	56.20 119	34.123 264	49.65	17.694 235	42.46	19.784 203	30.02 78
	31	44.039 235	55.01 136	34.387 309	47.98	17.929 269	40.35 211	19.987 236	29.24 78
Apr.	10	44.274 261	53.65 149	34.696	46.8T	18.198 299	38.24 206	20.223 266	28 80
_	20	44.535	52.16	35.042 375	16.20	18.497	36.18 196	20.489	29.00 56
	30	44.817	50.57 166	35.417 393	46.17	18.823 346	34.22 182	20.770	29.56 101
Mai	10	45.11/ 210	48.91 167	35.810	46.72 110	19.169 360	32.40 163	21.000	30.57
	20	45.427 314	47.24 165	36.211 398	47.82 162	19.529 366	30.77	21.403 317	31.99 178
	30	45.741	45.59	36.609 <sub>384</sub>	49.44 208	19.895	29.37	21.722	33.77 210
Juni	9	46.050 298	44.02	36.993 360	51.52 249	1 20.250	28.23 84	22.034 299	35.87 235
	19	40.340 278	42.57	37.353 326	54.01 282	20.610 330	27.39	22.333 276	38.22
	29	40.626	41.28 110	37.679 283	56.83 308	20.940	26.87 18	22.000	40.76 266
Juli	9	46.877 218	40.18 88	37.962 234	59.91 326	21.241 262	26.69 14	22.855 210	43.42 271
	19	47.095 178	39.30 65	38.196	63.17	21.503 217	26.83 47	23.065 160	46.13 270
	29	47.273	38.65	30.375	1 00.54	21.720	27.30 76	23.234	48.83 262
Aug.	8	1747.408 90	38.24	38.496	09.94 224	21.887	28.06	23.359 79	51.46
	17*)	47.498 43	38.07	38.557		22.000 57	29.08	23.438 32	53.96
	27	47.541 = 3	38.11 4	$38.558 = \frac{1}{56}$	76.51 323	22.057 2	30.33 140	23.470 13	56.29 212
Sept.	6	47.538 44	38.36 <sub>41</sub>	38.502 109	79.55 280	22.059 49	31.73 150	23.457 55	58.41 187
	16	47.494 87	38.77 55	38.393	82.35	22.010 06	33.23	23.402 91	60.28 158
	26	47.413	39.32 64	38.237	84.85	21.914 136	34.75	23.311	61.86
Okt.	6	47.301	39.96 69	38.040	86.99	21.778 166	30.24 128	23.190	63.13
	16	47.107 149	40.65 72	37.811 252	88.73	21.612 187	37.62	23.044 162	64.08 61
	26	47.018	41.37	37.559 267	90.02 81	21.425 198	38.83	22.882	64.69 25
Nov.	5	1 40.003	42.07 66	37.292	90.83 31	21.227	20.82	22.711	$64.94 \frac{25}{12}$
	15	46.710 144	10.70	37.020 269	$91.14 \frac{3^{1}}{22}$	21.029 190	10.55	22.539 167	64.82 48
	25	40.5000	$\begin{vmatrix} 42.73 & 59 \\ 43.32 & 52 \end{vmatrix}$	36.751 <sub>258</sub>	90.92	20.839	40.99 13	22.3/2	64.34 82
Dez.	5	46.438	43.84 42	36.493 <sub>237</sub>	90.18 74	20.667 148	$41.12 \frac{-3}{18}$	22.216	63.52 116
	15	46.331 84	44.26 <sub>31</sub>	36.256	88.94 172	20.519 119	40.94 48	22.076	62.36 146
	25	46.247 56	44.57 20	36.046	87.22	20.400 87	40.46 77	21.957 94	60.90
	35	46.191	44-77	35.870	85.08	20.313	39.69	21.863	59.18
Mittl	. Ort	43.880	61.69	34.408	52.73	18.104	52.51	19.777	31.58
$\sec \delta$		1.042	-0.294	-	+1.152	1.263	-0.771		+o.48o
a,		+3.3	+16.6	+2.2	-+16.6		+16.9		+16.9
b,	b'	-0.02	+ 0.56	+0.06	+ 0.56	0.04	+ 0.54	+0.03	+ 0.54
	1) Die	jährliche Paralla	ve (ourra) ist	hereits heriteksi	ohtiat				

 <sup>1)</sup> Die jährliche Parallaxe (o"114) ist bereits berücksichtigt.
 \*) Bei Stern 822) und 823) lies Aug. 18.

m	25.	827) α	Aquarii	830) 20	Cephei	828) ı A	quarii	829) α	Gruis
11	ng	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	22 <sup>h</sup> 2 <sup>m</sup>	-o° 36′	22h 3m	+62°29′	22 <sup>h</sup> 3 <sup>m</sup>	-14° 9′	22h 4m	-47° 14'
Jan.	I	41.775	37.86 83	10.38 29	53.73 222	11.421	39.73	26.440	74.25 134
	II	4T 720 33	28 60	10.09 22	51.51 263	TT 266 33	20.06	26 226	72.91 165
	21	17.600	39.48 79	9.87 16	48.88 292	TT.228 -	40.06	- (	71.26
	31	41.687	10 2T /3	0.71		TT 220	40.0T	, ,	60.33
Febr.	10	41.712	10.82	0.62	12.86	TT 268	0-	26.282	69.33 214
I con-	10	33	47		317		39.81 38	72	.67.19 232
Arman	20	41.767 86	41.30	9.62 8	39.69 311	11.428 90	39.43 56	26.354 116	64.87
März	1	41.853 117	41.57 5	9.70	30.50	11.518 123	38.87 76	26.470 162	62.42 253
	II	41.970 150	41.62 =	9.87 24	33.66 261	11.641	38.11 95	26.632 206	59.09 256
	21	42.120 182	41.41 47	10.11 33	31.05 220	11.796 187	37.16 116	26.838 249	57.33 254
	31	42.302 211	40.94 76	10.44 39	28.85 171	11.983 217	36.00 133	27.087 290	54.79 247
Apr.	10	42.513 240	40.18 103	10.83	27.14 116	12.200 245	34.67 149	27.377 326	52.32 236
	20	42.753 262	39.15	11.20	25.98 58	12.445	33.18 163	27.703 359	49.90 218
	30	43.016 282	37.88	11.77 49	25.40	12.710	31.55	28.062	47.78 106
Mai	10	43.299 206	36.38 167	12.29 53	25.43	13.000	29.84	1 28.446	45.82 170
	20	43.595 302	34.71 181	12.82 53	26.06	13.310 304	28.08 176	28.849 413	44.12 138
	30	43.897 301	32.90	13.35 52	27.27	13.620	26.32 171	29.262	42.74 104
Juni	9	44.198	31.00	13.87	29.02 223	13.931 302	24.61 160	29.674 402	41.70 67
	19	44.489 275	29.08 189	14.35	31.25 264	14.233	23.01	30.076 381	41.03 28
	29	44.764 250	27.19 182	14.79	33.89	14.518 261	21.54	30.457 349	40.75
Juli	9	45.014 219	25.37 170	15.18 39	36.89 327	14.779 230	20.25 108	30.806 309	40.87
	19	45.233 184	23.67 155	15.50 25	40.16	15.009 193	19.17 85	31.115 260	41.37 87
	29	45.417	22.12	15.75 17	43.63 347 358	15.202	18.32 60	31.375 204	42.24
Aug.	8	45.560 100	20.76	1 15.02	47.21 358	15.354 108	17.72 36	31.579 143	43.45
	18	45,660	10.61	16.01 2	50.83 358	15.462 62	17.36 12	31.722 80	44.94 173
	27	45.717 14	18.68 93	16.03 -	54.41 347	15.524 17	17.24 -	31.802 16	46.67 188
Sept.	6	45 525	17.07	15.96	57.88 <sub>327</sub>	TEEAT	T7 22	31.818	48.55 197
	16	45 505	T7 40	15.82	61.15 302	15556	17.62	31.773 45	50.52 197
	26	15 642	T7 00	15.61 27	64.17 269	TE.454	18.07	31.673	52.49 189
Okt.	6	45 55T	17.14	15.34 31	66.86 231	TE 260	18.64 57	31.523 189	FA 28
	16	45.436 132	17.25 26	15.03 36	69.17 187	15.240	19.30	31.334 218	56.11 149
	26		17.51	14.67 14.28 13.87		15.103 145	20.00	31.116	57.60 119
Nov.	5	45.304 <sub>140</sub> 45.164 <sub>142</sub>	17 OT	14.28 39	71.04	14.958 148	20.72	30.881 235	58.79 84
2,000	5 15	45.022	18.44 63	13.87	72.41 84 73.25 28	14.810	27 12	30.640	50.63
	25	44.885 127		13.46 41	72 62	14.668	22.08	30.640 235 30.405 219	59.63 46 60.09 6
Dez.	5	44.758 112	19.79 78	13.05 41	73.23 88	14.537	22.68 60	30.186	60.15 35
			20 57		155		52		59.80
	15	44.646 92	20.57 83	12.66	72.35 144	14.423 94	23.20	29.991 165	
	25	44.554 71	21.40 85	12.30 32	70.91 68.95	14.329 71 14.258	23.63 31	29.826	59.06
	35	44.483	22.25	11.90	100.95	14.250	23.94	29.090	57.95
	l. Ort	42.136	43.42	10.92	33.07	11.906	41.58	27.637	68.60
	, tg 8	1.000	-0.011	2.165	+1.920	1.031	-0.252	1.473	-1.082
	a'	+3.I	+17.5	+1.8	+17.5	+3.2	+17.5	+3.8	+17.6
Ъ,	b'	0.00	+ 0.49	+0.11	+ 0.49	0.01	+ 0.49	-o.o6	+ 0.48

Ta	a.o	834) म	Pegasi	835) π	Pegasi	837) 24	. Cephei	836) ζ	Cephei
	~~~	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	)40	22 <sup>h</sup> 7 <sup>m</sup>	+5° 54′	22 <sup>h</sup> 7 <sup>m</sup>	+32° 52′		+72° 2′	22 <sup>h</sup> 8 <sup>n</sup>	+57°54′
Jan.	1	10.038 61	14.59 108	18.935 104	74.04 190	38.61	65.85 210	45.746 239	38.11 218
	ΥI	0.077	13.51	18.831 76	72.14 212	1 2X.TT	03.75	45.507 190	35.93 255
	21	9.940 10	12.42	T8.755	70.02	37.71 30	61.20 291	45.317	33.38 284
	31	0.020	TI.35	18.713 6	67.75 231	37.41 18	58.29 314	1 4 E T X 2	30.54 302
Febr.	10	9.949 48	10.36 85	$18.707 \frac{0}{32}$	65.44	37.23 6	55.15 314	45.113 70	27.52 308
	20	0.005	0.51	3~				-	
März	20 I	9.997 <sub>80</sub> 10.077 <sub>112</sub>	9.51 8.84	18.739 18.813 115	63.17 <sub>212</sub> 61.05 <sub>188</sub>	37·17 7 37·24 20	51.89 325	45.111 7° 45.181 <sub>142</sub>	24·44 <sub>301</sub> 21·43 <sub>281</sub>
1/10/12	11	10.189	8.41 43	18.928	50.17	27.44	48.64 310	45,101 142	18 62
	21	10.334 178	8 26	19.086 198	59.17 <sub>156</sub>	37.44 33	45.54 283	45.323 213	18.62 252
	31	10.512	8.41	19.000 198	57.61	37·77 45	42.71 245 40.26 198	45.536 279	16.10 212
	3-		7"	19.284 236	56.44 73	38.22 45		45.815 340	13.98 163
Apr.	10	10.722	8.87 78	19.520 270	55.71 25	38.77 63	38.28	46.155 391	12.35 110
	20	10.960	9.65 109	19.790 298	55.46	39.40 69	30.83 87	40.540	11.25 52
	30	11.223	10.74	20.088	55.70 73	40.09 74	35.96 26	40.977	10.73 8
Mai	10	11.505	12.11	20.407	50.43	40.03	35.70 36	47.437 475	10.81 66
	20	11.802 297	13.72 181	20.739 337	57.62 162	41.59 75	36.06 96	47.912 477	11.47 123
	30	12.105	15.53	21.076	59.24 199	42.34 73	37.02	48.389 465	12.70 175
Juni	9	1 12.400	17.48	21.409	61.23	43.07 60	38.54 202	48.854	14.45
	19	14.090 2-6	19.52	21.729	03.55	43.70 6.	40.57 249	40.204	10.07 262
	<b>2</b> 9	1 12.974 252	21.00	22.020	00.12	44.37	43.06 288	49.090	10.30
Juli	9	13.226 252	23.66 198	22.294 232	68.87 287	44.91 45	45.94 321	50.055 302	22.26 323
	19	13.447 185	25.64 187	22.526	71.74 293	45.36 34	49.15 344	50.357 239	25.49 341
	29	13.632	27.51	1 22 710	74.67 290	45.70 34	52.59 26-	50.596 171	28.00
Aug.	8	13.777 103	29.22	22.860 144	77.57 282	45.93 12	56.20 369	50.767 102	32.42 352
	18	1 13.880	30.74 132	22.956 48	80.39	46.05	59.89 370	50.869 31	35.97 350
	27	13.939 54	32.06 109	323.004	83.08 250	46.05	63.59 362	50.900 38	39-47 337
Sept.	6	13.956	22.75	23.004	85.58 226	45.94 22	67.21 347	50.862	42.84 319
-	16	13.032	2101	22.060 44	87.84	45.72 32	70.68 347	50.758 163	46.03 294
	26	T2 872 39	21.64	22.876	89.83 168	45.40 41	73.93 295	50.595 216	48.97 261
Okt.	6	13.784	35.04 18	22.758	91.51	44.99 49	76.88 259	50.379 260	51.58 223
	16	13.671 130	35.22	22.612 166	92.84 96	44.50 55	79.47 216	50.119 297	53.81 180
	26	13.541	25 10	22.446 180	03.80	43.95 <sub>61</sub>	81.63 168		55.61 132
Nov.	5	13.402	24.06	22.266	04.27 3/	43·34 <sub>64</sub>	83.31	49.822 49.499 339	56.93 80
	15	13.260	7°	22.081 184	04 74 -	42.70 66	84.44 56	49.160 345 48.815	57.73
	25	13.122	22.07	21.897	94.29 65	42.04 66	85.00	48.815 341	57.73 25 57.98 31
Dez.	5	12.993 116	$\begin{vmatrix} 33.97 & 74 \\ 33.23 & 87 \end{vmatrix}$	21.720 164	93.64 106	41.38 64	84.96 65	48.474 327	57.67 87
		T2.877	-/			-	95	Ů,	=6.80
	15 25	T2 780 9/	32.36 99	21.556	92.58 142	40.74 <sub>61</sub>	84.31 83.07 <sub>181</sub>	48.147 302	
	35	12.703 77	31.37 <sub>106</sub>	21.410 122	91.16 174 89.42	40.13 54 39.59	81.26	47.845 <sub>268</sub> 47.577	55·39 191 53·48
3.51.42							0		
Mittl		10.335	7.31	19.155	59.41	39.47	43.81	46.120	18.08
sec δ,			+0.103		-+0.647	3.244	+3.086	1.882	+1.594
a,			+17.7		+17.7	+1.1	+17.7		+17.7
ь,	U	+0.01	+ 0.47	+0.04	+ 0.47	+o.18	+ 0.47	+0.09	+ 0.47

ŋı,	ag	840) &	Aquarii	841) α <sup>r</sup>	Tucanae	842) γ	Aquarii	844) β I	acertae
1.	~5	AR.	Dekl.	AR.	Dekl.	AR,	Dekl.	AR.	Dekl.
19	)40	22h 13m	-8° 4'	22 <sup>h</sup> 14 <sup>m</sup>	-60° 33′	22 <sup>h</sup> 18 <sup>m</sup>	-1°40'	22h 21m	+51° 55
Jan.	I	39.736	54.83	22.67 20	42.41 186	33.144 66	80.34	11.561 201	59.64 203
	II	30.675	55.22	22.47 13	40.55	22 078	ST TT	11.300	57.61 240
	21	20.628	55.74	22.34 7	38.33 254	22 026	8r 82 72	TT TOQ 102	55.21 267
	31	20.628	76.04	22.27	35·79 <sub>278</sub>	22.010	82.47	TT 082	52.54 285
Febr.	IO	20 615	56.20	22.26 -6	33.01 296	22.020	82.00	11.016	49.69 291
		40				37	30	_9	
3.5	20	39.691 78	56.19 20	22.32 12	30.05 306	33.069 <sub>71</sub>	83.38 19	11.007 50	46.78 285
März	I	39.769 109	55.99 42	22.44 18	20.00	33.140 102	$83.57 - \frac{2}{3}$	11.057	43.93 267
	II	39.878	55.57 64	22.62		33.242	83.54 28	11.169 173	41.26 239
	21	40.020	54.93 87	22.07	20.00	33·377 <sub>168</sub>	83.26	11.342	38.87
	31	40.194 205	54.06 109	23.18 31	17.80 284	33.545 200	82.71 81	11.574 286	36.87 155
Apr.	10	40.399 235	52.97 131	23.54	14.96 263	33.745 230	81.90	11.860 334	35.32 103
-	20	40.634 261	51.66	23.00	12.33	33·975 <sub>256</sub>	80.83		34-29 48
	30	40.895 282	50.16	24.42 49	9.96 205	34.231 278	79.52	12.566 402	22 ST
Mai	10	41.177 297	48.52	24.91 <sub>52</sub>	7.91 168	34.509 293	77.99 169	12.968	2200
	20	41.474 305	46.76 181	25.43 53	6.23 128	34.802 302	76.30 183	13.388 420	34.55 120
				6 .6 53		_			
T .	30	41.779 306	44.95 183	25.96 36.50 54	4.95 85	35.104 304	74.47 190	13.814 420	35.75 170
Juni	9	42.085	43.12 179	20.50 52	4.10 38	35.408 297	72.57 192	14.234 403	37.45 215
	19	42.384 284	41.33	27.02 50	$3.72 \frac{1}{8}$	35.705 282	70.65 188	14.637 375	39.60 254
T 11	<b>2</b> 9	42.668 261	39.63 156	27.52	3.80	35.987 260	68.77 181	15.012 227	42.14 286
Juli	9	42.929 232	38.07 139	27.98 41	4.34 98	36.247 232	66.96 169	15.349 291	45.00 312
	19	43.161	36.68	28.39 35	5.32 140	36.479 197	65.27 152	15.640	48.12 329
	29	43.358 197	25.48	28.74 28	6.72	36.676	63.75	15.878 181	51.41 338
Aug.	8	43.515 114	34.51	29.02	8.48 206	36.833 116	62.43	16.059 119	54-79 341
Ü	18	43,620	22.77	20.21	10.54 230	36.040	(AT 2T		58.20 337
	27	43.699 27	22.27	20.22	12.84 244	37.022 73	60.42 66	16.226 -	61.57 334
Sept.	6		22.00			3-	00	3	64 87
оори.	16	43.726	33.00 6	29.35 6	15.28 249	37.052	59.76	16.233 <sub>60</sub>	64.81 306
	26	43.712 52 43.660 84	32.94 13	29.29 14	17.77	37.041 36.994 <sub>78</sub>	59.33	16.173 113	67.87 281
Okt.	6	12 556	33.07 29	29.15 21	20.22	36.916	59.11 3	16.060 160	70.68 251
ORt.	16	43.576 <sub>108</sub> 43.468 <sub>127</sub>	33.36	28.94 27	22.52 206	36.812 <sub>122</sub>	*3	15.900 201	73.19 215
	10	12/	33.79 53	28.67 31	24.58 174		59.23 31	15.699 233	75.34 173
	26	43.341	34·32 60	28.36 28.01 35	26.32	36.690	59.54 43	15.466 257	77.07 128
Nov.	5	43.204	34.92 65	20.01 26	127.00 0	30,557	59.97 54	15.200	78.35 79
	15	43.064 138	35.57 67	27.65	28.55 30	30.420	60.51 64	14.937 200	79.14 27
	25	42.926 128	36.24 68	21.30	20.94 12	30.204 127	61.15 71	7.000 278	79.41 27
Dez.	5	42.798 115	36.92 65	26.95 35	28.82 63	36.157 115	61.86	14.380 268	79.14 80
	15	12.682	27 57	26.64 27	28.19 112	26.042	62.61	14.112 250	78.34 130
	25	12 587 90	28 TO	26.37 23	27.07	25 042	63.40 79	13.862 223	77.04 178
	35	42.511 76	38.76	26.14	27.07 <sub>158</sub> 25.49	35.943 <sub>80</sub> 35.863	64.19	13.639	75.26
		7322	30.70		-3.73				
Mittl		40.110	57.94	24.56	34.09	33.438	85.13	11.728	40.56
$\sec \delta$			-0.142	2.035	-1.772	1.000	0.029		$\pm 1.277$
a,		-	+17.9	+4.1	+18.0	_	+18.1		+18.2
b,	D'	-0.01	+ 0.45	-0.11	+ 0.44	0.00	+ 0.43	<b>+0.08</b>	+ 0.42

Ta	20	848) α I	acertae	850) η A	quarii	852) 10	Lacertae	8 <sub>55</sub> ) ζ	Pegasi
	**	AR.	Dekl.	AR.	Dekl.	AR.	Deki.	AR.	Dekl
19	40	22 <sup>h</sup> 28 <sup>m</sup>	+49° 58′	22h 32m	-0° 25′	22 <sup>h</sup> 36 <sup>m</sup>	+38°44′	22 <sup>h</sup> 38 <sup>m</sup>	+10°31'
Jan.	1	48.768	43.62	16.167	33.52 70	33.860	31.08	27.976 85	11.47
	11	48.575 158	41.68 231	16.003	33·3 <sup>2</sup> 79 34·31 76	33.718 117	29.31 206	27 801	10.33
	21	48.417 116	39.37 258	T6.040 33	25.07	33.601 85	27.25 228	27.827	9.13
	31	48.301 69	36.79 276	16.010	35.77 <sub>58</sub>	33.516 48	24.97 240	27.786 41	7.91 117
Febr.	10	48.232 16	34.03 283	$16.007 \frac{3}{25}$	36.35 44	33.468 8	22.57 243	27.771 15	6.74 107
	20	48.216	31.20	16.032 56	36.79 25	33.460 37	20.14 235	27.786 46	5.67 90
März	I	48.256	28.43	16.088 88	37.04 4	33.497 83	17.79 218	27.832 80	4.77 69
	II	48.355	25.82	16.176	37.08 =	33.580	15.61	27.912	4.08
	21	48.513	23.40	16.298	36.86 <sub>48</sub>	33.710 178	13.70	28.027	3.65
	31	48.728 269	21.51 197	16.453 189	36.38 75	33.888 223	12.15	28.178 186	3.53 20
Apr.	10	48.997 316	19.98 103	16.642	35.63 102	34.111 264	11.02 66	28.364 219	3.73 54
	20	49.313 355	18.95 48	16.863	34.61	34.375 200	10.36 17	28.583	4.27 88
	30	49.668 385	18.47	17.111	33.34	34.674 327	10.19 34	28.832	5.15
Mai	10	50.053	18.54 62	17.383	31.84 168	35.001	10.53 82	29.105	6.34
	20	50.458 414	19.17 116	17.673 301	30.16 183	35.348 357	11.36	<sup>29</sup> ·397 <sub>3°3</sub>	7.82
	30	50.872 410	20.33 166	17.974 304	28.33 191	35.705 358	12.66	29.700 307	9.54 193
Juni	9	51.282 206	21.99	18.278	20.42	36.063	14.40	30.007	11.47 207
	19	51.678 371	24.09	1 20.3/0 20-	24.47	30.412	16.51	30.309 290	13.54
	29	52.049 337	26.58 281	18.805 267	22.53 -0-	30.742	18.94 260	30.599	15.69 218
Juli	9	52.386 293	29.39 306	19.132	20.66	37.045 269	21.63 288	30.869 243	17.87 216
	19	52.679 243	32.45 323	19.372 207	18.91 160	37.314 228	24.51 299	31.112 209	20.03 208
	29	52.922 188	35.68 333	19.579 160	17.31	37.542 182	27.50	31.321	22.11
Aug.	8	53.110	39.01	19.748	15.89 120	37.724 133	30.54 303	31.493	24.07
	18	53-241 72	42.30 222	19.876 86	14.69 98	37.857 82	33.57 205	31.624 89	25.87 161
	28	53.313 13	45.70 320	19.962	13.71 75	37.939 33	36.52 280	31.713 46	27.48 139
Sept.	6	53.326	48.90 303	20.005 2	12.96	37.972	39.32 261	31.759 5	28.87 116
	16	53.284 95	51.93 278	20.007 = 34	12.44 29	37.958 58	41.93 237	31.764 31	30.03
	26	53.189 140	54.71 250	19.973 67	12.15 9	37.900 98	44.30 208	31.733 64	30.96 68
Okt.	6	53.049	57.21	19.906	12.06	37.802	46.38	31.669 90	31.64
	16	52.870 212	59.35 174	19.813 113	12.15 26	37.672	48.13 138	31.579 111	32.08 20
NT.	26	52.658 236	61.09 130	19.700	12.41 41	37.515 176	49.51 99	31.468 126	32.28 2
Nov.	5	52.422 252	102.39	19.573 132	12.82	37.339 190	50.50	31.342	32.26
	15	52.170 250	63.21	19.441	13.34 62	37.149 195	51.07	31.208	32.01
T)	25	1 31.911 260	03.33 20	1 19.300 128	13.96	30.954 106	51.20 32	31.0/3 133	31.50 64
Dez.	5	51.651 253	63.33 72	19.180 118	14.67 76	36.758 189	50.88	30.940	30.92 83
	15	51.398 237	62.61	19.062	15.43 81	36.569 177	50.13 118	30.816	30.09 97
	25	51.161	61.38 169	18.958 87	16.24 82	30.392 158	48.95 157	30.703 97	29.12
	35	50.947	59.69	18.871	17.06	36.234	47.38	30.606	28.02
	l. Ort	48.847	24.89	16.384	38.26	33.860	14.98	28.079	3.54
	, tg δ	1.555	+1.191	1.000	-0.007	1.282	+0.802	1.017	+0.186
	a'	+2.5	+18.5	+3.1	<b>18.6</b>	+2.7	+18.7	+3.0	18.8
b,	b'	+0.07	+ 0.39	0.00	+ 0.37	+0.05	+ 0.36	+0.01	+ 0.35

$T \epsilon$	a or	8 <sub>5</sub> 6) β	Gruis	857) n	Pegasi	859) l	Pegasi	860) ε	Gruis
18	ıg	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	22 <sup>h</sup> 39 <sup>m</sup>	-47° 11'	22 <sup>h</sup> 40 <sup>m</sup>	+29° 54′	22 <sup>h</sup> 43 <sup>m</sup>	+23° 14′	22 <sup>h</sup> 44 <sup>m</sup>	-51°37′
Jan.	I	4.581 <sub>143</sub>	64.07 112	11.151 118	38.83 161	38.270	69.69	55.269 171	67.36 125
oun.	II	4 428	62.95 148	T1.033	37.22 183		68.24 162	EE 00X	
	21		61.47	TO 008	35.20	28 08T	66.62	54.966	64.47
	31	1 261	59.67 209	TO.870	35·39 <sub>199</sub> <sub>33·40 <sub>206</sub></sub>	28 O2T	64.89	E4 876	62.48
Febr.	10	4 0 2 7	57.58 232	TO 822	31.34 <sub>206</sub>	27 000	62 12	E4 822 TT	60 TO
r cor.	10			-		37.990	63.12 173	3	60.19 253
	20	4.253 62	55.26 250	10.832	29.28	37.99 <b>1</b> 37	61.39 161	54.835	57.66
März	I	4.315	52.76	10.869 77	27.33 176	38.028	59.78	54.888 103	54.95 285
	II	4.422	50.12 272	10.946	25.57	38.101	58.36 114	54.991	52.10
	21	1 4.570 200	47.40	11.066	24.08 115	38.214	57.22 82	55.145 206	49.18
	31	4.776	44.66 272	11.:27 203	22.93 75	38.367	56.40	55.351 255	46.26 288
A 2025	Τ.Ο.			_	22.18				
Apr.	10	5.021 288	41.94 264	11.430	21.86	38.558	55.95	55.606 301	43.38 277
	20	5.309 327	39.30 250	11.670 273	13	38.785 259	55.91 37 56.28 78	55-907 344	40.61 261
Mai	30	5.636 359	36.80 <sub>230</sub>	11.943 300	21.99 59	39.044 285		56.251 381	38.00 238
Mai	10	7.447 -0-	34.50 205	12.243 320	22.58	39.329 305	57.06	56.632 409	35.62 210
	20	6.380 403	32.45 176	12.563 330	23.61 143	39.634 317	58.23 153	57.041 430	33.52 177
	30	6.783 410	30.69 141	12.893 333	25.04 180	39.951 321	59.76 184	57.471 440	31.75 139
Juni	9	7.193	29.28 104	13.226 333	26.84	40.272	61.60	57.911 439	30.36 98
	19	7.602 395	28.24 63	13.553 311	28.96 238	40.272 316 40.588 302	1 03.70		20.38
	29	1.991	27.61 21	13.864 288	31.34 256	40.890 281	10.00	58 776	28.83
Juli	9	8.369 372	27.40 = 22	14.152 256	33.90 269	41.171 252	68.46 252	59.179 367	28.72 34
			6-		-				
	19	8.706 295	27.62	14.408 220	36.59 276	41.423 218	70.98 254	59.546	29.06 78
A	<b>2</b> 9	9.001 241	28.24 101	14.628	39.35 275	41.641	73.52 251	59.000 260	29.84 118
Aug.	8	9.245 187	29.25 136	14.807 134	42.10 270	41.820 136	76.03 241	60.137 207	31.02
	18	9.432 126	30.61 165	14.941 87	44.000	41.956 91	78.44 227	60.344	32.56 185
	28	9.558 64	32.26 188	15.028 42	47.38 241	42.047 48	80.71 209	60.486	34.41 207
Sept.	6	9.622	34.14 203	15.070	49.79 221	42.095 6	82.80 187	60.560	36.48 223
•	16	0.622	36.17 200	T5.068 ~	52.00 196	42.101	84.67 164	60 767	38.71 220
	26	0 566 3/	38.26 208	T 7 00 7 43	53.96 169	12 068 33	86.31 136	60 500	41.00 225
Okt.	6	9.500 109	40.34 198	15.025 <sub>78</sub> 14.947 <sub>108</sub>	55.65 138	42 OOT	87.67 108	60 202	43.25 213
	16	9.303 190	42.32	14.839	57.03 104	41.905 118		60 005	45.38 193
		1		133			/-	/	
	26	9.113 214	44.10	14.706	58.07	41.787 136	89.53 46	60.018 238	47.30 16:
Nov.	5	1 8.800	45.02	14.557 161	58.77 32	41.051	89.99 14	59.780 256	48.92
	15	8.000	46.81 82	14.396	59.09 5	41.500	90.13 17	59.524 262	50.19 S
	25	0.430	47.63	14.230	59.04	41.356	89.96	59.262 258	51.04
Dez.	5	8.209 212	48.04	14.066	58.62 79	41.207 143	89.46	59.004 243	51.44
	15	1	48.02		57.83 114	41.064	88.67 109	58.761 221	51.38
	25	7.997 190	45 55	13.907	56.60	10.032	1 X7 CX	58.540	TO 86
	35	7.807 161 7.646	47.57 8 <sub>5</sub> 46.72	13.760 132	56.69 145 55.24	40.932 118	86.26	58.540 <sub>191</sub> 58.349	49.89
	33	7.040	40.72		33.24	40.014	00.20	39.349	49.09
Mitt	l. Ort	5.596	56.15	11.146	25.14	38.270	57.98	56.430	58.24
	tg δ	1.472	-1.080	1.154	+0.575	1.088	+0.430	1.611	-1.263
a,	a'	+3.6	+18.8	+2.8	+18.8	+2.9	+18.9	+3.6	+19.0
	b''	-0.07	+ 0.35	+0.04	+ 0.34	+0.03	+ 0.33	0.08	+ 0.32

ηr.	ag	863) ı	Cephei	864) λ <i>I</i>	Aquarii	865)	ρ Indi	866) δ	Aquarii
	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	22 <sup>h</sup> 47 <sup>m</sup>	+65°52′	22 <sup>h</sup> 49 <sup>m</sup>	-7° 53′	22h 50m	-70° 23'	22h 51m	-16° 8′
Jan.	ī	32.31 39	86.27	28.886	55.83	28.13 40	53.09 190	27.784 88	26.07
	11	2T 02	84.56 219	28 802	56 25	27.73 <sub>33</sub>	51.19	27 606	26.20
	21	31.58 34	82.37 259	28.728	56.76	27.40 25	48.84 275	27.627	26.22
	31	31.31 20	79.78 289	28 605	57 OF -9	27.15	46.00 275	27 582 43	26 TO
Febr.	10	31.11	76.80	28.678	$\frac{57.05}{57.19} \frac{14}{2}$	27.15 15 27.00 6	46.09 305	05 -60 =	2= 96 33
r cor.	10		76.89 307	9	3		43.04 329	27.503 8	25.00 54
3.50	20	31.00 2	73.82 313	28.687 40	57.16	26.94	39.75 344	27.571 39	25.32 74
März	I	30.98 -8	10.09	28.727	56.92	26.97	30.31	27.610 72	24.58
	11	31.06	07.02 _00	28.799	56.48	27.11	32.19 251	27.002	23.63
	21	31.23	64.74	28.904	55.81 91	27.34		27.788	22.47 136
	31	31.50 36	62.17 217	29.045 175	54.90 113	27.66 41	25.84 344 328	27.930	21.11
Apr.	10	31.86	60.00	29.220 209	53.77	28.07 49	22.56	28.107	19.57
	20		58.30 116	29.429 239	52.42	28.56 57	19.50 277	28.318	17.87 -0-
	30	22.80		29.668 266	50.87	29.13 63	16.73 243	20.501	10.04
Mai	10	33·35 55 33·35 58	56 56	29.934 286	49.16 182	29.76 68	14.30 202	28.831 291	14.12
	20	33.93 60	56.57	30.220	47.34 190	30.44 71	12.28		12.16 194
			39			· ·		30/	
	30	34.53 59	57.16 116	30.521 30.828 307	45.44 192	31.15 31.88 73	10.70 109	29.429 314	10.22 189
Juni	9	35.12 58	58.32	30.828 306	43.52 -88	31.88	9.61	29.743	8.33 178
	19	35.70	00.01	31.134 206	41.64	32.61 73 72	9.02 6	30.057	0.55 161
	29	30.25	02.10	31.430	39.84 .68	33.33 67	8.96	30.302 287	4.94
Juli	9	36.74 44	64.77 296	31.709 255	38.16	34.00 62	9.43 97	30.649 264	3.53 118
	19	37.18 36	67.73 323	31.964 223	36.66	34.62	10.40	30.913 232	2.35 92
	29	37.54 29	70.00	32.187 187	35.37 106	34.62 35.16 54	11.84 188	31.145 194	1.43 64
Aug.	8	37.83	74.40 358	32-374	34.31 82	35.6T	13.72	31.339 154	0.79 36
	18	38.04		32.521 104	22.40	35.96 35	15.97	31.493	0.43 8
	28	38.15 4	81.61 361	32.625 62	32.92 57	36.19 11	18.51 274	31.603 66	0.35 18
Sept.	6	38.19	85 22	3 687	22.67	36.30	21.25 285	3 660	0.52
	16	38.14 5	85.22 88.74 335	22 505	22.52	36.29	24.10 284	27 600	0.04
	26	28.00	03.00 335	22 680	22.66	36.16 24	26.94	31.674	T.54
Okt.	6	27.80	92.09 310	22 627	22.07	35.02	29.66	21 621 55	2 20 /3
Onc.	16	$37.53_{27}^{27}$ $37.53_{33}^{27}$	95.19 <sub>279</sub> 97.98 <sub>242</sub>	32.556 <sub>103</sub>	22 42	$35.92_{34}$ $35.58_{43}$	32.15 217	31.537 107	2.16
					50				9-
3.7	26	37.20 38	100.40	32.453 118	34.01 67	35.15 49	34.32	31.430 124	4.08 93
Nov.	5	36.82 <sup>38</sup> 42	102.38 148	32.335 128	34.68 71	34.66 <sup>49</sup>	36.07 126	31.306	5.01 91
	15	30.40		32.207	35.39 74	34.12 55	37.33 71	31.172	5.92 84
_	25	33.93 45	104.80 37	32.0/0 120	30.13	33·57 <sub>56</sub>	38.04 14	31.034	6.76 74
Dez.	5	35.50 46	105.17 23	31.947 122	36.86 7°	33.01 54	38.18 45	30.899 127	7.50 63
	15	35.04 45	104.94 82	31.825 110	37.56 <sub>65</sub>	32.47 <sub>50</sub>	37.73 103	30.772 116	8.13 48
	25	34.59 42	104.12	31.715 95	38.21 58	31.97 44	36.70 156	30.656	8.61 34
	35	34.17	102.74	31.620	38.79	31.53	35.14	30.556	8.95
Mittl	Ort	22.24	64.40	20.085	en 66	30.87	AT TA	28.068	25.30
sec δ.		32.24 2.448	64.49	29.085 1.010	57.66 0.139		41.14 —2.807	1.041	-0.289
a,		+2.I	+2.234		1		-2.807 +19.1	•	+19.2
ω,	b'	1 2.1	+19.1	+3.1	+19.1	4.2	19.1	+3.2	19.2

Ta	a.or	867) α Pi	sc. austr.	869) o And	dromedae	870) β	Pegasi	871) α	Pegasi
	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	22 <sup>b</sup> 54 <sup>m</sup>	-29° 56′	22 <sup>h</sup> 59 <sup>m</sup>	+42°0′	23 <sup>h</sup> 0 <sup>m</sup>	+27°45′	23 <sup>h</sup> I <sup>m</sup>	+14° 52′
Jan.	I	19.895 104	31.25	9.478 169	28.60 160	51.830 123	38.04 142	46.242	64.22
	II	19.791 85	30.05	9.309 .46	27.00	51.707 104	36.62	46.140 84	63.05 127
	21	19.706 56	30.36 $\frac{59}{86}$	9.163	25.00	51.603 81	34.98 180	46.056 64	61.78
	31	19.650 27	29.50	9.046 81	22.85	51.522	33.18 189	45.002 T	60.45
Febr.		19.623 $\frac{27}{4}$	28.39	8.965 40	20.47	51.469 53	31.29 189	45.953 11	59.12 126
	20	19.627 37	27.04	8.925	18.00	51.448	29.40 181	45.942 20	57.86
März	I	19.664 74	25.47	8.930	15.50 222	51.463 55	27.59 164	45.962 56	56.73
	II	19.738	23.70	8.984 106	13.24	51.518 06	25.95	46.018	55.80 69
	21	19.850	21.77	9.090	11.14	51.614	24.55 109	46.110	55.11 40
	31	20.000 188	19.70 217	9.248 207	9.36 178	51.753 181	23.46 73	46.241 168	54.71 6
Apr.	IO	20.188	17.53 224	9.455 254	7.97 95	51.934 220	22.73 32	46.409 204	54.65 28
	20	20.413	15.29	9.709 205	7.02 46	52.154 256	22.41 =	46.613	54.93 64
	30	20.672	13.04	10.004	6.56	52.410 286	22.52	46.851 266	55.57 o8
Mai	10	20.961	10.83	10.333	6.60	52.696	23.05	47.117 280	56.55
	20	21.274 330	8.71	369	7.15 104	53.005 324	24.00 135	47.406 303	57.85 160
	30	21.604 340	6.73	11.055 374	8.19	53.329 331	25.35 170	47.709 311	59.45 183
Juni	9	1 21.044	4.94 1.6	11.429	9.08	53.000 228	27.05	48.020	61.28
	19	22.284 332	3.38 137	11.799	11.59 226	53.988 317	29.06	40.330	03.31 216
	<b>2</b> 9	22.010	2.11	1 12.155 220	13.85	54.305 207	31.32	40.031 282	65.47
Juli	9	22.930 289	1.15 62	12.403 298	10.42 279	54.602 270	33.76 258	48.914 259	67.71 227
	19	23.219 256	0.53 28	12.781 259	19.21 296	54.872 237	36.34 263	49.173 229	69.98 223
	29	23.475 216	0.25	13.040	22.17	55.109 108	38.97 261	49.402	72.21 214
Aug.	8	23.691	0.32	13.253	25.23	55.307 156	41.61	49.594 152	74.35 202
	18	23.862	0.73 70	13.418	28.32	55.463	44.20	49.747 111	76.37 185
	28	23.986 75	1.43 98	13.532 63	31.37 295	55.574 67	46.69 233	49.858 69	78.22 165
Sept.	6	24.061 26	2.41	13.595 14	34.32 279	55.641 24	49.02	49.927 29	79.87 144
	16	24.087 20	3.61	13.609 33	37.11	55.665 16	51.16	49.956	81.31
	26	24.067 60	4.90	13.576	39.70	55.649 53	53.06	49.947	82.51 96
Okt.	6	24.007	0.41	13.501	42.02	55.596 84	54.71 137	49.903	83.47 70
	16	23.912 124	7.88	13.389	44.04 167	55.512 110	56.08 105	49.831 96	84.17
3.7	26	23.788	9.32	13.246 167	45.71 128	55.402 129	57.13 73	49.735 113	84.62 20
Nov.	5	23.045	10.00	13.079 186	46.99 86	55.273 143	57.86	49.622 126	84.82
	15	23.489 161	11.03 96	12.893 198	47.85 42	55.130	58.25	49.490	84.77
D	25	1 43.340 770	12.79 73	12.093 204	48.27	54.970 100	58.29 30	49.304 122	84.48
Dez.	5	23.169 150	13.52 46	12.491 203	48.24 50	54.823 152	57.99 <sub>65</sub>	49.231	83.96 74
	15	23.019 136	13.98	12.288 196	47·74 <sub>95</sub>	54.671 <sub>146</sub>	57·34 <sub>98</sub>	49.101	83.22
	25	22.883	14.15	12.092 183	46.79	54.525 134	56.36	48.978	82.29 110
	35	22.764	14.03	11.909	45.42	54.391	55.09	48.867	81.19
	. Ort	20.376	26.42	9.280	11.79	51.692	25.26	46.180	55-47
	$tg \delta$	1.154	-0.576		+0.901	1.130	+0.526	1.035	+0.266
a,		+3.3	+19.2		+19.3		+19.4	+3.o	+19.4
Ъ,	b'	-0.04	+ 0.28	+0.06	+ 0.26	+0.03	+ 0.26	+0.02	+ 0.25

Ta	0	872) 8	Gruis	874) π	Cephei	873) 88	Aquarii	875) Br 30	77 Cass 1)
	0	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	$23^{\text{h}} 3^{\text{m}}$	-43°50′	23 <sup>h</sup> 5 <sup>m</sup>	+75° 3′	23 <sup>h</sup> 6 <sup>m</sup>	-21°29′	23 <sup>h</sup> 10 <sup>m</sup>	+56° 50′
Jan.	I	29.614 152	50.03 80	59.32 71	69.95	14.713 102	57.23	22.252	22 72
o air.	II	29.462 123	49.23 118	58.61 63	68.59	× 4 6 T T	57.20	<sup>2</sup> 3·353 <sub>269</sub> <sub>23·084 <sub>240</sub></sub>	32.72
	21	20 220	48.05	57.08	66.69 238	T4 F08	57.T2	22.844	31.22 196 29.26 233
	31	20.247	46.53 184	57.98 54 57.44 42	64.31 276	T 4 46H	E6 72 40	22.645 150	26.93 <sub>263</sub>
Febr.	10		44.69 210	57.02 28	61.55 <sub>304</sub>	TA 42T	-6	22.495 92	24.30 281
2 0011		10					3		
3.60	20	29.173 23	42.59 234	56.74 13	58.51 318	14.424 23	55.26 108	22.403 27	21.49 288
März	1	29.196 66	40.25	$56.61 \frac{13}{3}$	55.33 220	14.447 57	54.18	$22.376 \frac{1}{43}$	18.61 283
	11	29.262	37.73 264	50.04	52.13	14.504 92	52.89 149	22.419 115	15.70 267
	21	29.373 157	35.09 272	56.82 57.16 34 57.16 48	49.04 286	14.596 129	51.40 168	22.534 187	13.11 239
	31	29.530 202	32.37 275	57.10 48	46.18 253	14.725 167	49.72 183	22.721 257	10.72 202
Apr.	10	29.732 246	29.62 272	57.64 61	43.65 209	14.892 203	47.89 196	22.978 321	8.70
	20	29.978	20.90 262	58.25	41.56	15.095 237	45.93 206	23.299 376	7.13 108
	30	30.264	24.27 248	58.97 80	39.97	15.332 267	43.87	23.675 421	6.05 53
Mai	10	30.580 252	21.79 228	59.77 0-	38.93	15.599 201	41.77	24.096	5.52 3
	20	30.938 374	19.51 202	60.64 89	$38.48 \frac{13}{14}$	15.890 310	39.68 204	24.551 475	5·55 <sub>58</sub>
	30	31.312 387	17.49	61.53 90	38.62	16.200	37.64 193	25.026 483	6.13
Juni	9	31.000	15.78 136	62.43 88	39.35 129	10.520	35.71 193	25.509	7.24 .62
	19	32.089 383	T4.42	63.31	40.64 181	1 10.045 216	33.94 156	25.985 458	8.86
	29	32.472 366	13.45 97 13.45 56	64.15	42.45 229	17.159	32.38	20.443	10.94 247
Juli	9	32.838 338	12.89	64.92 69	44.74 271	17.461 278	31.06 104	26.870 386	13.41 281
	19	33.176 302	T2.76	65.6T	47.45 305	17.739 249	20.02	27.256 336	16.22 308
	<b>2</b> 9	33.478 302	T2 05		50.50	17.988 213	20.20	27.592 280	19.30 308
Aug.	8	33.735 206	13.75 108	66.67 47		18.201	28.87	27.872 218	22.58 320
Ü	18	22 O 4 T	14.83	67.02 35		18.373 128	28.76 = 11	28.090	25.08
	28	33.941 151 34.092 93	16.24 168	67.24 10	$61.05 \frac{367}{372}$	18.501 83	28.96 48	28.244 88	29.43 343
Sept.	6*)	24 185		7 67.34 4	64.77 370	-0 -0 4	20.44	28 222	32.86
жере.	16	24 220 =	17.92 <sub>190</sub> 19.82 <sub>203</sub>	67.30 4	68.47 360	18.622	20 TF	28 256	36.20 334
	26	24.100	21.85 207	67.14 28	72.07 360	T8.6T8 4	31.07 <sub>106</sub>	28.210	39.38 295
Okt.	6	34.127 116	23.92 202	l 66.86	75.49 316	T8.576 42	32.13	28 225	42.33 267
	16	34.011	25.94 190	66.46 40	78.65 283	18.501 75	33.28 115	28.079 <sub>192</sub>	45.00 231
	26			65.06			i		
Nov.		33.857 182	27.84 169	65.96 <sub>58</sub>	81.48	18.400 18.278	34.46	27.887 230	47.31 <sub>191</sub>
1101.	5	33.675 200	29.53		83.90 196	18.270	35.61 109	27.657 261	49.22 146
	15	33.475 209	30.94 107	64.72	85.86 142 87.28 84	18.144	36.70 97	27.396 284	50.68 95
Dez.	25	33.266 210	32.01 69	76	88 12	18.003 141	37.07 81	27.112 298	52.05 43
Dez.	5	33.056 202	32.70 29	63.24 78		17.862 136	38.48 63	26.814 304	52.00
	15	32.854 188	32.99	62.46	88.36	17.726	39.11 43	26.510 200	51.93 67
	25	32.666	32.87	01.09 75	87.98	17.600	39.54 21	26.210 287	51.26
	35	32.499	32.34	60.94	86.98	17.488	39.75	25.923	50.06
Mitt	l. Ort	30.374	41.30	58.90	46.94	14.993	54.19	22.980	12.65
	$tg \delta$		-0.960	3.880	+3.749	1.075	-0.394	1.828	+1.530
	a'	+3.4	+19.4	+1.9	+19.5	+3.2	+19.5	+2.6	+19.6
Ъ,	b'	-0.06	+ 0.24	+0.24	+ 0.23	-0.03	+ 0.23	+0.10	+ 0.21
	1) Die	jährliche Paralla	ave (0"745) ist	t hereits herücks	sightigt.				

<sup>1)</sup> Die jährliche Parallaxe (0.7145) ist bereits berücksichtigt.
\*) Bei Stern 874), 873) und 875) lies Sept. 7.

Та	o.	877) y T	'ucanae	879) y Sc	culptoris	880) τ	Pegasi
	Ď.	AR.	Dekl	AR.	Dekl.	AR.	Dekl.
194	to	23 <sup>h</sup> 13 <sup>m</sup>	-58° 33′	23 <sup>h</sup> 15 <sup>m</sup>	-32° 51'	23 <sup>h</sup> 17 <sup>m</sup>	+23° 24
Jan.	r	55.102 256	65.69 124	34.883 127	39.47	40.032	53.24 125
	II	~. 0.6 =30	64.45	34.756 106	20 TH	40.010	51.99
	21	E4 620 21/	62.73	24 650	28 55	20 804	50.54
	31	54.457	60.61 248	24 568	27 6T 2T	20 777	48.97 164
Febr.	10	F4 226	58.13 277	24 512	26.20	30.655	47.33 164
		54.330 66		34.2.3 53	30.39 149	34	47.33 162
	20	54.270 8	55.36 <sub>300</sub>	34.490	34.90	39.621	45.69 156
März	I	54.262	52.30 316	34.500	33.17 195	39.621	44.13
	II	54.315 115	49.20 325	34.547 86	31.22	39.658	42.72
	21	54.430	45.95 328	34.633	29.09 227	39.735 118	41.54 8
	31	54.607 239	42.67 323	34.760 168	26.82	39.853 160	40.65
Apr.	10	F1 816					
upi.	20	290	39.44 311	34.928 207	24.45 243 22.02	40.013 200	40.09
		55.144 354	36.33 294	35.135 246	244	40.213 237	39.90 2
Mo:	30	55.498 402	33.39 269	35.381 279	19.58 239	40.450 269	40.11 6
Mai	10	55.900 443	30.70 238	35.660 308	17.19 229	40.719 294	40.71 9
	20	56.343 475	28.32 202	35.968 329	14.90 214	41.013 312	41.69 13
	30	56.818	26.30 161	36.297	12.76	41.325 321	43.03 16
Juni	9	F7 2T2 494	24.69 116	36.639 342 36.639 348	10.84 166		44.69
	19	57 ST4	00 50	26.087		41.060 323	
	29	E8 211 49/	23.53 68	27.220 343	7 82 130	42.284 300	18 78
Juli	9	E8 780 T/	02 67	27 660	6.80	42.584 276	51.10 <sub>24</sub>
	,	44/	31	30/	05		
	19	59.236 401	22.98 80	37.967 276	6.15 28	42.860 245	53.52 24
	<b>2</b> 9	59.637	23.78 125	38.243	5.87 =	43.105	55.98
Aug.	8	59.982 280	25.03 167	38.482	5.97 47	43.315 170	58.43
	18	60.262	26.70	38.678	6.44 8r	43.485 129	60.81
	28	60.469 129	28.73 231	38.826 99	7.25 110	43.614 86	63.08
Sept.	<b>H</b>						
bept.	7	60.598 51	31.04 250	38.925 49	8.35	43.700 44	65.20
	16	60.649 27	33.54 260	38.974 2	9.70	43.744 4	67.12
Okt.	26	60.622	36.14 259	38.976 42	11.23 164	43.748 31	68.82
OKI.	6	60.521 167	38.73 248	38.934 80	12.87 169	43.717 63	70.27
	16	60.354 223	41.21 228	38.854 112	14.56 164	43.654 89	71.45
	26	60.131 268	43.49 197	38.742	16.20	43.565 110	72.36
Nov.	5	59.863 301	45.46 158	38.605	17.74	43.455	72.08
	15		47.04 113	38.451 163	19.11	43.330 136	
	25	50 242		38.288 165		43.194 141	72 20 -
Dez.	-3 5	68 016 J	48 8T	38.123 162	27.72	43.053	72.01
~ 02.	J	320	12		21.12 56		/3.01
	15	58.596 302	48.93	37.961 152	21.68 25	42.911 138	72.42
	25	58.294 276	48.52	37.809 138	21.93 -9	42.773	71.55
	35	58.018	47.59	37.671	21.84	42.642	70.43
352113	0.1	-60				0.0	
Mittl		56.418	53.58	35.305	32.74	39.808	42.14
sec δ,		1.917	-1.636	1.190	-0.646	1.090	+0.433
a,		+3.5	+19.6	+3.2	+19.7	+3.0	+19.7
b,	b'	-0.11	+ 0.20	_o.o4	+ 0.19	+0.03	+ 0.18
							L40

Tag	0.00	882) 4 Ca	ssiopeiae	884) ĸ	Piscium	885) 70	Pegasi
	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	23 <sup>h</sup> 22 <sup>m</sup>	+61° 57′	23 <sup>h</sup> 23 <sup>m</sup>	+0° 55'	23 <sup>h</sup> 26 <sup>m</sup>	+12° 25′
Jan.	ı	10.27 35	32.72	51.402	40.40	7.254 100	53.24 102
o wiii	II		OT 47 -3*	fr 201	20 6T 79	7 1/5	F2 02
	21	0.6- 31	29.59 225	ET 2T2	28.86	7.040	CT TT ***
	31	9.01 28	27 24	ET 142	38.17	6.060	10.06
Febr.	10		27.34 259	ET 000	1 19 1	6.911	1000
rebr.	10	*3	24.75 283	51.092 25	37.58 46	33	40.02 107
	20	8.96	21.92 296	51.067	37.12 29	6.878	47.75 95
März	1	8.89	18.96 297	51.070 35	36.83	$6.876 {31}$	46.80 78
	11	8.89	15.99 284	51.105 60	36.75 -	6.907	46.02 55
	21	8.98	13.15 262	51.174 107	36.90 40	6.974	45.47 27
	31	9.16 26	10.53 228	51.281	37.30 68	7.079	45.20 =
Apr.	10	9.42	8.25 187	51.425 180	37.98 94	7.224 183	45.22
	20	9.76 40	6.38	51.605 215	38.92	7.407 219	45.57 68
	30	10.16 46	130	L CT SOO	40 TT	7.626 251	46.25 100
Mai	10	TO 62 40	4.15	F0 066 240	41.55 164	m Qnn 251	45.05
	20	11.12 50	3.86 29	52.338 272	43.19 180	8.153 <sub>296</sub>	48.55 156
	20	11.64	4.74	52.628			50.11
Juni	30	54	4.14 83	F0 010	44.99 <sub>192</sub> 46.91 <sub>108</sub>	8.449 3°7	
Jum	9	12.18	4.97 136	52.930 306	40.91	8.756 311	51.90 196
	19	12.72	6.33 185	53.236 302	48.89 199	9.067 305	53.86 208
T32	29	13.24 48	8.18 228	53.538 289	50.88	9.372 293	55.94 215
Juli	9	13.72 44	10.46 267	53.827 269	52.83 186	9.665 272	58.09 216
	19	14.16	13.13 299	54.096	54.69 171	9.937 245	60.25 212
	29	14.55 22	10.12	54.339 210	56.40	10.182	62.37
Aug.	8	14.88 26	19.34 340	54.549 173	57.94	10.393 175	64.40
	18	15.14 19	22.74	54.722	59.27	10.568	66.29
	28	15.33 11	26.25 353	54.856	60.38 87	10.703 95	68.02 153
Sept.	7	115.44 5	29.78 348	54.949 54	61.25 62	10.798 55	69.55
	16	15.49 3	33.26 336	1255.003 16	61.87	10.853 16	70.86
	26	15.46	36.62 317	55.019 19	62.27	10.869	71.94 85
Okt.	6	15.36 16	39.79 291	55.000 49	62.44	10.851	72.79 61
	16	15.20	42.70 260	54.951 74	62.40	10.803 74	73.40 37
	26	14.98 26	45 20	54.877	62.19	TO.720	72 77
Nov.	5	14.72	45 50	E4 782 94	6T 82 3/	10.635 110	$73.92 \frac{15}{8}$
	15	14.72 30 14.42 34	47.50 175	54.675	67 22 50	TO FOR	= 0 0 4
	25	14.08 34		54.558 121	60.72	10.406	72 76
Dez.	-3 5	13.72 38	51.22 72	54.437 121	60.02	10.281 126	73.08 48
		3°	15	74.776	74		-/
	15	13.34 37	51.37 42	54.316	59.29 79	10.155 123	72.41 82
	25 35	12.97	50.95 98	54.200 <sub>109</sub> 54.091	58.50 79 57.71	9.915	71.59 97
			49.97	34.091	31.11	3,3,2	70.02
	l. Ort	9.68	11.71	51.329	36.95	7.065	45.98
	$t  ext{, tg } \delta$	2.127	$\pm 1.877$	1.000	+0.016	1.024	+0.220
	a'	+2.7	+19.8	+3.1	+19.8	+3.0	+19.8
b, b'		+0.12	+ o.16	0.00	-+ 0.16	+0.01	+ 0.15

Ta	0.0	891) i Ar	dromedae	892) i	Piscium	893) y	Cephei
	*b	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	23 <sup>h</sup> 35 <sup>m</sup>	+42° 56′	23 <sup>h</sup> 36 <sup>m</sup>	+5° 18′	23 <sup>h</sup> 36 <sup>m</sup>	+77° 17′
Jan.	I	11.701	25.36	51.932	7.97 88	53.27 88	73.88
buil.	II	1 109	24 TT	51.825	7 00	F2 20	72.98
		11.512	. 104	97	6.07	52.39 81	140
	21	11.338	22.47 194	51.728 81	80	51.58 73	71.49 202
D . 1	31	11.187 122	20.53 218	51.647 62	5.35 79	50.85 61	69.47 248
Febr.	10	11.065 85	18.35 233	51.585 38	4.56 69	50.24 46	66.99 282
	20	10.900 42	16.02 237	51.547 11	3.87	49.78	64.17 306
März	I	10.938	13.65 233	51.536	3.32 35	49.49 11	61.11 318
	II	10.945 60	11.32 217	51.558	2.97 13	49.38	57.93 315
	21	11.005	9.15 192	51.615 94	2.84 13	49.45 26	54.78 301
	31	11.119 169	7.23 160	51.709 133	2.97 41	49.71 44	51.77 276
Apr.	IO	11.288	5.63 121	51.842	3.38 69	50.15 61	49.01
	20	11.508 268	4.42 76	52.014 207	4.07 97	50.76	46.61
	30	11.776 309	3.66	52.221 240	5.04 125	51.51 86	44.66
Mai	10	T2.08F	2 27	52.461 267	6.29 148	E2 27	43.22
	20	12.427 365	3.57 68	52.728 288	7.77 169	53.33 102	42.33
	30	T2 702	4.25 114	53.016 302	9.46 185	54.35 104	12.02
Juni	9	10 757		53.318 302	11.31 196	55.39 105	42.29
	19	T2 552	6.06	F2 626	T2 27	1 56 44	12.T2
	29	T2.028	8 02	E2 020	TC 08	E7 15	44.52
Juli	9	14.285 357	11.21 256	54.224 276	17.29 196	58.41 88	46.42
	19	14.616 298	13.77	54.500 250	19.25 187	59.29 78	48.78 276
	29	14.914 257	16.54 291	54.750 220	OT TO	60.07 67	51.54 310
Aug.	8		19.45 299	54.070	22 84 172	60.74	
	18	15.1/1 212	22.44 301	CC TCA	24 00 133	61 27 33	58 OT 33/
	28	15.547	25.45	FF 200	24·39 <sub>134</sub> 25·73 <sub>112</sub>	61.67	67 -8 357
~ .			25.45 296	100	1	23	309
Sept.	7	15.661 66	28.41 285	55.406 67	26.85 88	61.92 10	65.27 374
	16	15.727 18	31.25	55.473 29	27.73 65	62.02	69.01 371
	26	15.745 27	33.95 240	55.502 6	28.38	61.97	72.72 359
Okt.	6	15.718 66	36.44	55.496 36	28.80 20	61.78	76.31 341
	16	15.652 102	38.66	55.460 62	29.00	61.45 46	79.72 314
	26	15.550 133	40.57	55.398 84	29.00	60.99 58	82.86
Nov.	5	15.417 168	42.14	55.314	28.81	60.41 69	85.65 226
	15	15.259 ,78	43.32 77	55.214 111	28.47 49	59.72 78	88.01
	25	15.001	44.09 33	55.103 117	27.98 62	58.94 85	89.89
Dez.	5	14.890 200	44.42	54.986	27.36	58.09 90	91.22 73
	15	14.690 201	44.20	54.866	26.64 <sub>80</sub>	57.19 92	91.95
	25	14.489 198	12 72 5/	54.748 114	25.84 85	56.27	02.06
	35	14.291	43.72 101	54.634	24.99	55.36	91.54
Mittl.	Ort	11.179	8.86	51.742	3.49	51.87	50.87
sec δ,		1.366	+0.930	1.004	±0.093	4.548	÷4.436
a,		+2.9	+19.9	+3.1	±19.9	+2.5	+19.9
b,		+0.06	+ 0.II	+0.0I	+ 0.10	+0.29	+ 0.10
	U'	0.00	0.11				

Ta	. ~	894) ω²	Aquarii	895) 41 H	. Cephei	896) δ Sc	culptoris
1.8	ıg	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19.	40	23 <sup>h</sup> 39 <sup>m</sup>	-14° 52′	23 <sup>h</sup> 45 <sup>m</sup>	+67° 28'	23 <sup>h</sup> 45 <sup>m</sup>	-28° 27′
Jan.	I	36.685 112	39.01	2.65 46	45.87 06	48.053	50.66
	ΙI	36.573 100	20.40		11.07	47.018 233	50.60
	21	26 452	20.50	T 77	12 10 151	15 50	FO 40
	31	36.390 <sub>64</sub>	20.58	т 26 39	41.40	47.798 <sub>103</sub> 47.695 <sub>80</sub>	40.8T 39
Febr.	10	36.326 40	39.37 44	1.03 33	38.98 274	47.615	48.92 118
	20	36.286 <sub>12</sub>	38.93 66	0.78 16	36.24 295	47.561 <sub>24</sub>	47.74
März	I	36.274	38.27 go	0.62 6	33.29 303	$47.537 \frac{-7}{10}$	46.30 169
	ΙΙ	36.293 54	37.37	0.56	30.26 200	47.547 48	44.61
	21	36.347 <sub>92</sub>	36.25	0.61	27.27 281	47.595 87	42.70 210
	31	36.439 130	34.91 155	0.76	24.43 257	47.682 129	40.60 225
Apr.	10	36.569 <sub>168</sub>	33.36	1.01 36	21.86	47.811	38.35 236
	20	36.737 205	31.63 180	1.37 44	19.65	47.982	35.99 242
	30	36.942	29.74 <sub>201</sub>	1.81 51	17.89 126	48.192	33.57
Mai	10	37.181 267	27.73	2.32 58	16.63	48.439 270	31.13
	20	37.448 290	25.66 209	2.90 62	15.91 15	48.718 305	28.73 229
	30	37·738 <sub>3°5</sub>	23.57 206	3.52 64	15.76	49.023 323	26.44 213
Juni	9	38.043 313	21.51	4.16	16.17 96	49.346 333	24.31 193
	19	38.356 313	19.54 183	4.80 63	17.13 148	49.679 334	22.38 166
	29	38.668 303	17.71 164	5.43 60	18.61 196	50.013 327	20.72
Juli	9	38.971 285	16.07 142	6.03 56	20.57 240	50.340 310	19.37 101
	19	39.256 262	14.65	6.59 50	22.97 276	50.650 285	18.36 65
	29	39.518 230	13.50 86	7.09 43	25.73 308	50.935 253	17.71 27
Aug.	8	39.748	12.64	7.52 36	28.81 331	51.188 215	17.44
	18	39.942	12.09 25	7.88 28	32.12	51.403 173	17.55
	28	40.097 113	11.84	8.16	35.60 357	51.576 128	18.02 %
Sept.	7	40.210 72	11.88	8.35 10	39.17 359	51.704 82	18.82 109
	16*)	40.282 31	12.20 55	8.45 2	42.76 352	51.786 37	19.91
	26	40.313 6	12.75 76	8.47 6	46.29 341	51.823	21.24
Okt.	6	40.307 39	13.51 90	8.41	49.70 320	51.817	22.13 160
	16	40.268 68	14.41	8.26 22	52.90 292	51.773 76	24-33 162
	26	40.200 gi	15.42 106	8.04 29	55.82 2.8	51.697 104	25.95 159
Nov.	5	40.109 107	16.48	7.75	58.40 216	51.593 125	27.54
	15	40.002	17.53 <sub>101</sub>	7.41 40	60.56	(0)	29.02 130
	25	39.883 126	18.54 93	7.01	62.24 116	51.329 148	30.32 109
Dez.	5	39.757 127	19.47 81	6.57 46	63.40 58	51.181 150	31.41 82
	15	39.630	20.28 67	6.11 48	63.98	51.031 148	32.23 54
	25	39.505 119	20.95	5.63 48	63.98 60	50.883 140	32.77
	35	39.386	21.46	5.15	63.38	50.743	33.01
	l. Ort	36.695	36.53	1.57	24.26	48.218	43.66
	, $\operatorname{tg} \delta$	1.035	-o.266	2.610	+2.411	1.137	-0.542
	a'	+3.I	+20.0	-+-2.9	+20.0	+3.1	<b>-</b> 20.0
Ъ,	b'	<b>−0.0</b> 2	+ 0.09	+0.16	+ 0.07	-0.04	+ 0.06

<sup>\*)</sup> Bei Stern 895) und 896) lies Sept. 17.

# Obere Kulmination Greenwich

		898) φ	Pegasi	902) ω	Piscium	903) ε [	Fucanae
T:	ag	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
19	40	23 <sup>h</sup> 49 <sup>m</sup>	+18°47′	23 <sup>h</sup> 56 <sup>m</sup>	+6° 31′	23 <sup>h</sup> 56 <sup>m</sup>	-65° 54'
Jan.	1	26.298	22.11	14.002	56.33 84	47.36 41	54.79
	II	26 772	27.08	T2 887 113	FF 40	46.95 38	F1 80 99
	21	26.057	117	T2.78T	F1 60	46 57	F2 26
	31	25.055	T8 62	Ta 686 93	1276	46.25 27	FO 22
Febr.	10	25.872	T# 20	T2 608	52.05	45.98 21	47.77 283
		39	-3-	13.008 56	/~		
3.50	20	25.813 29	15.98 126	13.552 30	52.23 58	45.77 <sub>14</sub>	44.94 313
März	I	25.784	14.72	13.522	51.65	45.63 6	41.81 336
	II	25.789	13.60	13.524 36	51.24 19	45.57 2	38.45 350
	21	25.831 84	12.68	13.560 75	51.05 6	45.59 10	34.95
	31	25.915 126	12.01 38	13.635	51.11	45.69 18	31.38 356
Apr.	IO	26.041 167	11.63	13.749 154	51.43 61	45.87 26	27.82
-	20	26 208	TT.58	T2.002 -31	F2.04	46.13 34	24.25 34/
	30	26 475	TT 88	T 4 006 193	F2 02	46.47 41	27.02
Mai	10	26 655	T2.52	T 4 202	E4 TO/	1 46.88	17.05
	20	26.929 296	T2.5T 99	14.581 281	55.51 163	47.26	15.17 242
			-3-		103	33	
γ.	30	27.225 310	14.81	14.862 298	57.14 180	47.89 57	12.75 200
Juni	9	27.535 318	16.40 182	15.160 307	58.94 193	48.46 59	10.75 152
	19	27.853 216	18.22	15.467 307	60.87 200	49.05 61	9.23 101
x 11	29	28.169 306	20.23 215	15.774 299	62.87 202	49.66 <sub>60</sub>	8.22 48
Juli	9	28.475 288	22.38	16.073 283	64.89 199	50.26	7.74 7
	19	28.763 264	24.60	16.356 262	66.88	50.83 <sub>54</sub>	7.81 61
	29	29.027 233	26.85 222	16.618	68.78	51.37 49	8.42 113
Aug.	8	29.260 233	29.07 214	16.851 199	70.56	51.86	9.55 162
	18	29.457	31.21	17.050 163	72.17	52.28	11.17 205
	28	29.616	33.22 186	17.213 125	73.58	52.61 33	13.22
Sept.	7	20.725	25.08	T# 228	74.78	52.85 15	15.64 268
-	17	20.814	36.75 <sub>146</sub>	77 404	7575 9/	E2.00	18.32 286
	26	20.855	2× 2T	T7 472	76.48	£3.05 =	OT TX
Okt.	6	20.860	20.44	T7 48=	76.08	£2.00	292
	16	20.833	10.13	T7.467	70.96 28	52.86	26.07
	- (	] 33	/4	45	_	24	- 00
NT	26	29.778 79	41.17	17.422 69	77.34	52.64 30	29.68 243
Nov.	5	29.699 98	41.66	17.353 87	77.23 28	52.34 36 51.98 40	32.11 206
	15	29.601 113	41.91	17.266	76.95 43		34.17 161
D.	25	29.488	41.90 26	17.165 112	70.52	51.58 12	35.78 109
Dez.	5	29.365 129	41.64 50	17.053 117	75.96 <sub>67</sub>	51.15 44	36.87 53
	15	29.236	41.14 71	16.936	75.29 76	50.71 45	37.40 5
	25	29.105	40.43 92	16.816	74.53 83	50.26 42	37.35 63
	35	28.976	39.51	16.698	73.70	49.84	36.72
Mittl	. Ort	25.905	13.42	13.686	52.12	48.77	39.19
	, tg δ	1.056	+0.340	1.007	+0.115	2.450	-2.237
a,		+3.1	÷20.0	+3.1		+3.1	+20.0
<i>b</i> ,		+0.02	+ 0.05	+0.01	+ 0.02	-0.15	+ 0.01
,			- 5				

#### Obere Kulmination Greenwich

Na) 43 H	ev. Cephei	4 <sup>m</sup> 52
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		Janua	r		Februa	ır		März		ĺ	April	
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	I, o,	85° 56′	0.0I 0.0I	I <sub>p</sub> O <sub>m</sub>	85° 56′	10.0	Ip om	85° 56′	0.01 0.01	I <sub>p</sub> O <sub>m</sub>		0.01 0.01
I	20.90	31.87	-7 + 2	11.80	31.18	+1 - 5	5.06	25.42	+6 -2	s 2.24	16.08	+6 +8
2	20.61	31.94	-6 <b>- 2</b>	11.52	31.06	+5 - 4	4.89	25.15	+8 +1	2.24	15.77	+3 +8
3	20.32	32.01	-4 - 4	11.25	30.93	+7 - I	4.72	24.88	+8 +4	2.25	15.45	o +8
4	20.02	32.07	-ı - 6	10.98	30.79	+8 + 2	4.56	24.61	+7 +6	2.26	15.13	-3 +6
5	19.72	32.13	+2 - 5	10.71	30.65	+8 + 4	4.40	24.33	+5 +8	2.28	14.82	-5 +4
6	19.42	32.18	+5 - 3	10.44	30.50	+6 + 6	4.25	24.05	+2 +8	*)2.31	14.50	-7 +1
7	19.13	32.22	+7 - I	10.18	30.34	+3 + 7	4.11	23.77	-I +7	2.34	14.18	-7 -2
8	18.83	32.25	+8 + 2	9.92	30.18	+1 +7	3.97	23.49	<del>-4</del> +5	2.37	13.87	-6 <del>-</del> 5
9	18.53	32.28	+7 + 5	9.66	30.02	-2 + 6	3.83	23.20	<del>-6 +2</del>	2.41	13.56	-4 <b>-</b> 7
10	18.23	32.30	+5 +6	9.40	29.85	<u>-5</u> + 4	3.70	22.91	-7 -I	2.46	13.25	<b>-2 -8</b>
II	17.94	32.32	+2 + 7	9.15	29.67	-7 + 1	3.58	22.62	-7 -4	2.51	12.94	+r -8
12	17.64	32.33	-1 + 7	8.90	29.49	-7 - 2	3.46	22.32	-6 -7	2.57	12.63	+4 -7
13	17.35	32.33	-3 + 5	8.65	29.31	-7 - 5	3-34	22.02	-4 -9	2.64	12.32	+6 -4
14	17.05	32.33	-6 + 3	8.40	29.12	-5 <b>-</b> 8	3.23	21.72	-ı -g	2.71	12.01	+6 —ı
15	16.75	32.32	-7 0	8.16	28.92	-3 -10	3.13	21.41	+2 -9	2.79	11.71	+5 +2
16	16.45	32.31	-8 - 4	7.93	28.72	0 -10	3.03	21.11	+4 -6	2.87	11.41	+3 +5
17	16.15	32.29	-7 - 7	7.70	28.51	+3 - 8	2.94	20.80	+6 -3	2.96	II.II	-ı +6
18	15.85	32.26	<del>-4</del> - 9	7.47	28.30	+6 - 5	2.85	20.49	+6 +1	3.05	10.82	<del>-4</del> +5
19	15.56	32.22	-I -IO	7.24	28.08	+6 — r	2.77	20.18	+4 +4	3.15	10.52	-7 +2
20	15.26	32.18	+2 - 9	7.02	27.86	+5 + 3	2.69	19.87	+1 +6	3.25	10.23	−8 −r
21	14.97	32.13	+5 - 6	6.81	27.64	+3 + 6	2.62	19.56	-2 +6	3.36	9.94	-7 -4
22	14.67	32.08	+7 - 3	6.60	27.41	0 + 7	2.56	19.25	-6 +5	3.47	9.65	<b>-4 -6</b>
23	14.38	32.02	+7 + 1	6.39	27.18	-3 + 6	2.50	18.93	-7 +2	3.59	9.36	∘ −6
24	14.09	31.95	+5 + 5	6.19	26.94	-6 + 4	2.45	18.62	-7 -1	3.72	9.07	+4 -5
25	13.80	31.87	+2 + 7	5.99	26.70	-7 + I	2.40	18.30	-5 -4	3.85	8.79	+7 -2
26	13.51	31.79	-2 + 7	5.80	26.45	-6 <b>- 2</b>	2.36	17.98	-2 -5	3.98	8.51	+9 +1
27	13.22	31.70	-5 + 6	5.61	26.20	-4 - 4	2.33	17.67	+2 -5	4.12	8.24	+9 +5
28	12.93	31.61	-7 + 3	5.42	25.94	o — 5	2.30	17.35	+5 -3	4.27	7.97	+7 +7
29	12.65	31.51	<i>-</i> 7 ∘	5.24	25.68	+4 - 4	2.28	17.03	+8 0	4.42	7.70	+4 +9
30	12.36	31.41	-5 - 3	5.06	25.42	+6 - 2	2.26	16.71	-+9 -+3	4.57	7.43	+1 +9
31	12.08	31.30	-2 - 5				2.25	16.40	+8 +6	4.73	7.17	-2 ÷7
32	11.80	31.18	+r - 5				2.24	16.08	+6 +8			
	2											n

 $\alpha_{1940.0} = 1^{h} \circ^{m} 9.64$ 

 $\delta_{1940.0} = +85^{\circ} 56' \text{ 10.91}$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: April 6.

Obere Kulmination Greenwich

		Na) 43 Hev. Cephei $4^{\text{m}}_{\cdot}52$											
Tag		Mai			Juni			Juli			Augus	t	
146	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Deki.	© Glieder	AR.	Dekl.	© Glieder	
		+	in		-+-	in		+	in		+	in	
	$I^h$ $o^m$	85° 56′	0.01 0.01	I <sub>p</sub> O <sub>m</sub>	85° 55′	0.01 0.01	I <sub>p</sub> O <sub>m</sub>	85° 55′	0.01 0.01	Ih om	85° 56′	0.01 0.01	
1	4.73	7.17	-2 +7	11.75	61.11	-7 -3	20.82	59.95	-2 -9	30.23	3.85	+7 -2	
2	4.90	6.91	<b>-</b> 4 +5	12.03	60.99	66	21.14	59-99	+1 -8	30.51	4.06	+6 +1	
3	5.07	6.66	-6 <b>+2</b>	12.31	60.88	<del>-4</del> -7	21.45	60.04	+4 -7	30.79	4.27	+4 +4	
4	5.24	6.41	-7 −I	12.60	60.77	-ı —8	21.77	60.10	+6 -4	31.06	4.49	+1 +6	
5	5.42	6.16	<u></u> − <sub>7</sub> <del>−</del> 4	12.88	60.67	+2 -7	22.08	60.17	+7 0	31.33	4.71	-2 +7	
6	5.60	5.91	<b>-5 -6</b>	13.17	60.57	+5 -5	22.39	60.24	+6 +3	31.60	4.93	<b>-</b> 5 +5	
7	5.79	5.67	-3 -8	13.46	60.48	+6 -2	22.71	60.31	+3 +6	31.87	5.16	-7 +2	
8	5.98	5.43	o —8	13.75	60.39	+6 +1	23.02	60.39	0 +7	32.14	5.39	<b>−</b> 6 <b>−</b> 1	
9	6.18	5.20	+3 -7	14.05	60.31	+5 +4	23.33	60.48	<b>−3</b> +6	32.40	5.62	-5 -4	
10	6.38	4.97	+5 -5	14.34	60.24	+2 +6	23.65	60.57	-6 +4	32.66	5.86	-2 -5	
II	6.59	4.75	+6 <b>-1</b>	14.64	60.17	-r +6	23.96	60.66	-7 +I	32.91	6.10	+1 -5	
12	6.80	4.53	+6 +2	14.94	60.10	-4 +5	24.28	60.76	-7 -2	33.17	6.35	+5 -4	
13	7.01	4.32	+4 +4	15.24	60.04	-7 +2	24.59	60.87	-4 -5	33.42	6.60	+7 -1	
14	7.23	4.11	+1 +6	15.54	59.99	-7 -I	24.90	60.98	-ı -6	33.67	6.86	+8 +2	
15	7.45	3.90	-3 +5	15.85	59.94	-6 -4	25.21	61.10	+2 -5	33.91	7.12	+8 +5	
16	7.68	3.70	-6 +4	16.15	59.90	<b>−3 −6</b>	25.51	61.22	+5 -3	34.15	7.39	+6 +7	
17	7.91	3.50	-7 0	16.46	59.86	06	25.82	61.35	+7 0	34.39	7.66	+3 +8	
18	8.14	3.31	-7 -3	16.76	59.83	+3 -5	26.12	61.48	+8 +3	34.63	7.93	o +8	
19	8.38	3.12	<u>-5 -5</u>	17.07	59.81	+6 -2	26.43	61.62	+7 +5	34.87	8.20	<b>-3</b> +6	
20	8.62	2.94	-2 -6	17.38	59.79	+8 +1	26.73	61.76	+5 +7	35.10	8.48	-5 +4	
21	8.86	2.76	+2 -6	17.69	59.78	+8 +4	27.03	61.91	+2 +8	35.33	8.76	-7 +1	
22	9.11	2.58	+5 -4	18.00	59.77	+6 +7	27.33	62.06	-I +7	35.56	9.04	-7 -2	
23	9.36	2.41	+8 -r	18.31	59.77	+4 +8	27.63	62.22	<b>-4</b> +5	35.78	9.33	-6 -5	
24	9.61	2.25	+8 +3	18.63	59.77	-+-1 -+8	27.93	62.38	-6 + 3	36.00	9.62	<b>−5 −8</b>	
25	9.87	2.09	+8 +6	18.94	59.78	-2 +7	28.22	62.54	-7 0	36.21	9.92	<b>-2 -9</b>	
26	10.13	1.93	+6 +8	19.25	59.80	-5 +4	28.51	62.71	-7 -4	36.42	10.22	+1 -9	
27	10.39	1.78	+3 +9	19.57	59.82	-7 +I	28.80	62.89	-6 -7	36.63	10.52	+4 -7	
28	10.66	1.64	-ı +8	19.88	59.84	-7 -2	29.09	63.07	-4 -8	36.84	10.83	+6 -4	
29	10.93	1.50	-4 +6	20.19	59.87	<b>−</b> 7 <b>−</b> 5	29.38	63.26	-r -9	37.04	11.14	+6 -1	
30	11.20	1.36	-6 +3	20.51	59.91	<u>-5</u> -7	29.67	63.45	+2 -8	37.24	11.45	+5 +2	
31	11.47	1.23	-7 0	20.82	59.95	-2 -9	29.95	63.65	+5 -6	37.43	11.77	+3 +5	
32	11.75	1.11	-7 -3				30.23	63.85	+7 -2	37.62	12.09	o +6	

 $\alpha_{1940.0} = 1^h \circ^m 9.64$ 

 $\delta_{1940.0} = +85^{\circ} 56' 10''.91$ 

Obere Kulmination Greenwich

Na) 43 Hev. Cephei 4 <sup>m</sup>
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Tag		Septeml	oer	Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+-	in		+	in
	Ih om	85° 56′	0.01 0.01	I <sub>p</sub> O <sub>m</sub>	85° 56′	0.01 0.01	I <sub>p</sub> O <sub>m</sub>	85° 56′	0.01 0.01	Ih om	85° 56′	0.01 0.01
I	37.62	12.09	0 +6	41.50	22.63	-8 +ı	41.21	34.46	+4 -5	36.69	43.68	+8 +3
2	37.80	12.41	<b>-4</b> +5	41.56	23.01	-7 -2	41.12	34.81	+7 -2	36.47	43.93	+7 +6
3	37.98	12.73	-6 + 3	41.62	23.38	<b>−</b> 6 −5	41.03	35.16	+9 +2	36.25	44.17	+5 +9
4	38.16	13.06	<b>−</b> 7 ∘	41.67	23.76	<b>-2</b> -6	40.93	35.51	+8 +5	36.03	44.41	+2 +9
5	38.34	13.39	-6 -3	41.72	24.13	+2 -5	40.83	35.85	+7 +8	35.81	44.64	-ı +8
6	38.51	13.72	<b>-4 -5</b>	41.76 41.80	24.51 24.88	+6 -3 +8 o}	40.73	36.19	+4 +9	35.58	44.87	-4 +6
7	38.68	14.05	∘ −5	41.84	25.26	+9 +3	40.62	36.53	+1 +9	35.35	45.09	-6 +3
8	38.84	14.39	+3 -4	41.87	25.63	+8 +7	40.51	36.87	-2 +7	35.11	45.31	-7 0
9	39.00	14.73	+7 -2	41.90	26.01	+5 +8	40.39	37.21	-5 +5	34.87	45.53	<u>−6</u> <del>−3</del>
10	39.16	15.07	+8 +1	41.92	26.39	+2 +9	40.27	37.54	<del>-6 +2</del>	34.63	45.74	-4 -5
II	39.31	15.41	+8 +4	41.94	26.76	-r +8	40.14	37.87	-6 -ı	34.38	45.94	-2 <b>-</b> 7
12	39.46	15.76	+7 +7	41.96	27.14	<b>-3</b> +6	40.01	38.19	-6 <b>-</b> 4	34.13	46.14	° -7
13	39.60	16.11	+4 +8	41.97	27.51	-5 +3	39.87	38.51	-4 -6	33.88	46.33	+3 -7
14	39.74	16.46	+1 +8	41.97	27.88	<i>−</i> 6 ∘	39.73	38.83	-2 -7	33.62	46.51	+5 -5
15	39.88	16.81	-2 +7	41.97	28.26	-6 -2	39.59	39.15	+1 -7	33.36	46.69	+6 -2
16	40.01	17.16	-4 +5	41.96	28.63	-5 -5	39.44	39.46	+3 -6	33.10	46.87	+6 +1
17	40.14	17.51	-6 +2	41.95	29.00	<b>-4</b> -7	39.29	39.77	+5 -4	32.84	47.04	+4 +4
18	40.27	17.87	—6 —1	41.93	29.38	-r -8	39.13	40.07	+6 <b>-</b> 1	32.58	47.20	+2 +5
19	40.39	18.23	-6 -4	41.91	29.75	+2 -8	38.97	40.37	+5 +2	32.31	47.36	-ı +5
20	40.51	18.59	-5 -7	41.89	30.12	+4 -6	38.80	40.67	+3 +4	32.04	47.51	<b>−5</b> +4
21	40.62	18.95	<b>−3 −8</b>	41.86	30.49	+6 -4	38.63	40.97	0 ⊣-5	31.76	47.65	-7 +I
22	40.73	19.32	∘ −9	41.82	30.86	+6 -I	38.45	41.26	-3 + 5	31.49	47.79	-7 -2
23	40.83	19.68	+2 -8	41.78	31.22	+5 +2	38.27	41.55	<b>−</b> 6 +3	31.21	47.92	-7 -5
24	40.93	20.04	+5 -6	41.74	31.59	+2 +4	38.09	41.83	-8 0	30.93	48.05	-4 <b>-</b> 7
25	41.02	20.41	+6 -3	41.69	31.95	<u>−τ</u> +5	37.90	42.11	<b>−</b> 8 −3	30.65	48.17	0 -7
26	41.11	20.78	+6 0	41.63	32.32	-5 +4	37.71	42.38	-6 -6	30.37	48.29	+3 -5
27	41.20	21.15	+4 +3	41.57	32.68	-7 +2	37.51	42.65	-2 -7	30.08	48.40	+6 -3
28	41.28	21.52	+1 +5	41.51	33.04	_8 _r	37.31	42.91	+ı <b>−</b> 6	29.79	48.50	+8 +1
29	41.36	21.89	-3 +5	41.44	33.40	<u>−7</u> −4	37.11	43.17	+5 -4	29.50	48.60	+8 +4
30	41.43	22.26	-6 +4	41.37	33.76	-4 -6	36.90	43.43	+7 -r	29.21	48.69	+6 +7
31	41.50	22.63	-8 +ı	41.29	34.11	06	36.69	43.68	+8 +3	28.92	48.77	+3 +9
32				41.21	34.46	+4 -5				28.62	48.85	0 +9

$$\delta_{1940.0} = +85^{\circ} 56' 10''.91$$

#### Obere Kulmination Greenwich

						Ursae mi		2 m I 2				
Tag		Janua	r		Februa	ır		März			April	
6	AR.	Dokl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Gliede
		+	in		+	in		-	in		+	in
	1h 42m	88° 59′	0.01 0.01	1 <sup>h</sup> 42 <sup>m</sup>	88° 59 <b>′</b>	0.01 0.01	1 42 m	88° 58′	0.01 0.01	1 <sup>h</sup> 42 <sup>m</sup>	88° 58′	0.01 0.0
I	91.52	2.85	-26 +3	54.75	4.23	+4-5	23.82	60.02	+24 -3	5.95	51.41	+24 +7
2	90.41	2.99	-25 -r	53.56	4.17	+17 - 5	22.95	59.79	+31 0	5.72	51.10	+13 +8
3	89.30	3.12	-17 -4	52.37	4.10	+27 - 2	22.10	59.56	+32 +2	5.51	50.78	+ 2 +8
4	88.17	3-25	- 5 -5	51.19	4.03	+31 0	21.26	59.33	+28 +5	5.33	50.46	-10 +7
5	87.03	3.37	+ 9 -6	50.02	3.95	+30 + 3	20.44	59.09	+19 +7	5.17	50.15	-19 +5
6	85.88	3.49	+20 -5	48.85	3.86	+24 + 5	19.64	58.85	+ 8 +7	5.03	49.83	-25 +2
7	84.73	3.60	+28 -2	47.69	3.77	+15 + 7	18.86	58.60	- 3 +7	4.91	49.52	-27 -
8	83.57	3.70	+30 +1	46.53	3.67	+ 4 + 7	18.10	58.35	-13 +6	4.82	49.20	-24 -
9	82,41	3.80	+28 +4	45.38	3.56	-8+6	17.35	58.09	-2I +3	4.75	48.88	-18 -
10	81.23	3.89	+21 +6	44.24	3.45	-18 + 5	16.62	57.83	-27 0	4.70	48.56	-10 -8
II	80.05	3.97	+10 +7	43.11	3.33	-25 + 2	15.91	57.57	-28 -3	4.68	48.25	+1-
12	78.87	4.05	- r +7	41.99	3.21	-29 - I	15.23	57.30	-24 -6	4.68	47.93	+13 -
13	77.68	4.12	-I2 +6	40.87	3.08	-28 - 4	14.56	57.03	<b>-17 -8</b>	4.70	47.61	+20 -
14	76.49	4.19	-22 ÷4	39.77	2.94	-23 - 7	13.91	56.76	<b>−</b> 7 −9	4.75	47.30	+23 -
15	75.29	4.25	-28 +I	38.68	2.80	-13 - 9	13.28	56.49	+ 5 -9	4.82	46.98	+20 +
16	74.09	4.30	-30 -2	37.59	2.65	- 2 -10	12.68	56.21	+16 -7	4.91	46.67	+11 +
17	72.88	4.34	-27 -6	36.52	2.50	+10 - 9	12.09	55.93	+22 -4	*)5.03	46.35	- 3 +
18	71.68	4.38	-19 -8	35.46	2.34	+20 - 6	11.53	55.64	+22 0	5.17	46.04	-16 +6
19	70.47	4.41	<b>−8 −9</b>	34.42	2.18	+25 - 2	10.99	55.35	+16 +3	5.33	45.72	-25 +
20	69.26	4.43	+ 6 -9	33.38	2.01	+22 + 2	10.47	55.06	+ 6 +6	5.52	45.41	-30 +
21	68.04	4.45	+17 -7	32.36	1.84	+13 + 5	9.97	54.76	- 8 +7	5.72	45.10	-26 -
22	66.83	4.46	+24 -4	31.36	1.66	+ 1 + 7	9.49	54.47	-20 +6	5.95	44.79	-16 -
23	65.61	4.47	+25 0	30.36	1.47	-12 + 7	8.03	54.17	-27 ±3	6.20	44.48	- 3 -
24	64.40	4.47	+19 +4	29.38	1.28	-23 + 5	8.60	53.87	<b>−28</b> ∘	6.47	44.17	+12 -
25	63.19	4.46	+ 9 +7	28.42	1.08	-27 + 2	8.19	53.57	-21 -3	6.77	43.87	+25 -
26	61.97	4.45	- 5 +8	27.47	0.88	-24 - I	7.80	53-27	-8-5	7.08	43.57	+33
27	60.76	4.43	-17 +-7	26.53	0.67	-14 - 4	7.44	52.96	+ 6 -5	7.42	43.27	+33 +
28	59.56	4.40	-25 +4	25.61	0.46	- r - 5	7.09	52.66	+20 -4	7.78	42.97	+28 +
29	58.35	4.37	-26 +I	24.71	0.24	+13 - 5	6.77	52.35	+30 -2	8.16	42.67	+19 +
30	57.15	4.33	-20 -2	23.82	0.02	+24 - 3	6.47	52.04	+34 +1	8.56	42.38	+7+
31	55-95	4.28	- 9 -4				6.20	51.73	+32 +4	8.99	42.09	- 5 +
32	54.75	4.23	+ 4 -5				5.95	51.41	+24 +7			

 $<sup>\</sup>alpha_{1940.0} = 1^{h} 42^{m} 34.16$ 

 $<sup>\</sup>delta_{1940.0} = +88^{\circ} 58' 44''.26$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: April 17.

Obere Kulmination Greenwich

Nb)	α	Ursae	minoris	2 <sup>m</sup> 12
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П		Mai			Juni			Juli			Augus	t
Tag	AR.	Dekl	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+-	in		+	in		+	in
	1 42 m	88° 58′	0.01 0.01	1 <sup>h</sup> 42 <sup>m</sup>	88° 58′	0.01	1 <sup>h</sup> 43 <sup>m</sup>	88° 58′	0.01 0.01	1 <sup>h</sup> 43 <sup>m</sup>	88° 58′	0.01 0.01
1	8.99	42.09	- 5 +7	31.33	34.62	-27 -2	4.88	31.53	-10 <b>-8</b>	43.23	33.38	+24 -4
2	9.43	41.80	-16 +6	32.30	34.44	-23 -5	6.10	31.51	+ r -8	44.43	33.52	+24 o
3	9.89	41.51	-23 +3	33.29	34.27	-16 -7	7.33	31.49	+13 -7	45.63	33.67	+17 +4
4	10.37	41.23	<b>—</b> 26 o	34.28	34.10	<b>−</b> 6 −8	8.57	31.48	+21 -5	46.82	33.82	+ 7 +6
5	10.88	40.94	-26 -3	35.29	33.94	+ 6 -8	9.80	31.48	+25 -1	48.01	33.98	- 6 + <del>7</del>
6	11.40	40.66	-20 -6	36.32	33.78	+17 -6	11.04	31.48	+23 +2	49.19	34.14	<b>−</b> 18 +6
7	11.95	40.39	-12 -7	37.35	33.63	+23 -3	12.28	31.49	+14 +5	50.36	34.31	-26 +4
8	12.51	40.11	- I -8	38.40	33.48	+24 0	13.52	31.50	+ 2 +7	51.53	34.48	26 o
9	13.09	39.84	+ 9 -7	39.46	33-34	+19 +3	14.76	31.52	—II +7	52.69	34.66	-21 -3
10	13.69	39.57	+18 −6	40.52	33.20	+ 9 +6	16.01	31.54	-21 +5	53.85	34.84	<b>-10 -5</b>
II	14.32	39.30	+-233	41.60	33.07	- 4 + <sub>7</sub>	17.25	31.57	-28 +2	55.00	35.02	+ 4 -6
12	14.96	39.04	+22 +I	42.69	32.94	<b>—</b> 16 +6	18.50	31.60	-26 -I	56.14	35.21	+17 -5
13	15.62	38.78	+15 +4	43.79	32.82	-25 +3	19.75	31.64	-18 -4	57.28	35.41	+27 -2
14	16.30	38.52	+ 4 +6	44.90	32.70	<b>−</b> 28 ∘	21.00	31.68	<b>−</b> 5 <b>−</b> 6	58.40	35.61	+32 0
15	16.99	38.27	<b>-</b> 9 +6	46.02	32.59	-24 -3	22.24	31.73	+8 -6	59.52	35.81	+30 +4
16	17.71	38.02	-21 +4	47.15	32.49	-15 <b>-</b> 5	23.49	31.79	+20 -4	60.62	36.02	+23 +6
17	18.44	37.78	-28 +2	48.28	32.39	— I —6	24.74	31.85	+28 -2	61.73	36.23	+13 +7
18	19.19	37.54	-28 -I	49.42	32.29	+12 -6	25.99	31.91	+31 +1	62.83	36.45	+ 2 +8
19	19.96	37.30	-22 -4	50.57	32.20	+23 -4	27.24	31.98	+28 +4	63.91	36.67	- 9 +7
20	20.74	37.07	<b>-</b> 9 <b>-</b> 6	51.73	32.11	+-311	28.48	32.06	+20 +7	64.99	36.90	-19 +5
21	21.54	36.84	+ 6 -6	52.90	32.03	+31 +3	29.73	32.14	+ 9 +8	66.06	37.13	-25 +2
22	22.35	36.62	+19 -5	54.07	31.96	+25 +5	30.97	32.23	- 3 +7	67.12	37.36	-26 -I
23	23.18	36.40	+29 -2	55.25	31.89	+17 +7	32.21	32.32	<b>—14</b> +-6	68.16	37.60	-24 -4
24	24.03	36.19	+32 +1	56.43	31.83	+ 5 +8	33.45	32.42	<b>-22</b> +4	69.20	37.84	-19 -7
25	24.89	35.98	+31 +4	57.62	31.77	- 7 +7	34.68	32.52	-27 +I	70.22	38.09	-10 -9
26	25.77	35.77	+23 +7	58.82	31.72	-17 +5	35.92	32.63	-27 -2	71.24	38.34	+ 1 -9
27	26.66	35.57	+12 +8	60.02	31.67	-25 +2	37.15	32.74	-23 -6	72.24	38.59	+13 -8
28	27.57	35.37	0 +8	61.23	31.63	-27 -I	38.37	32.86	-15 -8	73.24	38.85	+22 -5
29	28.49	35.18	-12 +7	62.44	31.59	-26 -4	39.59	32.98	- 4 -9	74.22	39.11	+24 -2
30	29.42	34.99	-21 +4	63.66	31.56	-20 -6	40.81	33.11	+8 -9	75.20	39.38	+21 +2
31	30.37	34.80	-26 ÷1	64.88	31.53	-ro -8	42.02	33.24	+18 -7	76.16	39.65	+12 +5
32	31.33	34.62	-27 -2				43.23	33.38	+24 -4	77.11	39.92	- I +6
-	1 0 .		i	64.88	31.53	-ro -8	1 '		'	1	1	

$$\alpha_{1940.0} = 1^{h} 42^{m} 34.16$$

$$\alpha_{1940.0} = 1^{h} 42^{m} 34.16$$
  $\delta_{1940.0} = +88^{\circ} 58' 44.26$ 

#### Obere Kulmination Greenwich

	$Nb$ ) $\alpha$ Ursae minoris $2^{\text{m}}.12$											
Tag		Septeml	ber		Oktob	er		Novemb	er		Dezemb	er
1 ag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	1 <sup>h</sup> 44 <sup>m</sup>	88° 58′	0.01 0.01	1 <sup>h</sup> 44 <sup>m</sup>	88° 58′	0.01 0.01	1 <sup>h</sup> 44 <sup>m</sup>	88° 59′	0.01 0.01	1 <sup>h</sup> 44 <sup>m</sup>	88° 59′	0.01 0.01
1	17.11	39.92	<b>-</b> 1 +6	39.28	49.52	-29 +2	46.22	1.34	+12 -6	34.55	11.56	+33 +2
2	18.05	40.20	-14 +6	39.78	49.88	-28 -I	46.12	1.71	+25 -3	33.87	11.86	+30 +5
3	18.97	40.48	-24 +4	40.26	50.24	-22 -4	46.00	2.08	+33 0	33.16	12.15	+21 +8
4	19.89	40.76	-29 +2	40.72	50.60	-10 <b>-6</b>	45.86	2.45	+33 +4	32.43	12.44	+10 +9
5	20.79	41.05	-25 -2	41.17	50.96	+ 5 -6	45.70	2.81	+27 +7	31.69	12.72	- 3 +9
6	21.68	41.34	_16 _4	41.60	51.32	+20 -4	45.52	3.18	+17 +9	30.93	13.00	<b>—</b> 14 <del>1</del> -7
7	22.56	41.63	- 2 -5	42.02	51.69	+30 -1	45.32	3.54	+4+9	30.15	13.28	-21 +4
8	23.42	41.93	+12 -5	42.41	52.05	+33 +2	45.10	3.90	- 7 +8	29.36	13.55	-24 +J
9	24.27	42.23	+25 -3	42.79	52.42	+31 +6	44.86	4.26	-16 +6	28.55	13.81	-24 -2
10	25.10	42.54	+31 0	43.15	52.79	+23 +8	44.60	4.62	-23 +3	27.72	14.07	-18 -5
II	25.92	42.84	+32 +3	43.49	53.16	+12 +8	44.32	4.97	-25 0	26.88	14.33	-11 -7
12	26.73	43.15	+28 +6	43.82	53.53	0 +8	44.02	5.33	-22 -3	26.02	14.58	- I -7
13	27.52	43.46	+18 +8	44.12	53.90	-II +7	43.70	5.68	<b>−17</b> −5	25.15	14.83	+ 9 -7
14	28.30	43.78	+ 6 +8	44.41	54.27	-19 + <sub>4</sub>	43.36	6.03	− 8 − <sub>7</sub>	24.26	15.07	+18 -6
15	29.07	44.10	- 5 + <sub>7</sub>	44.68	54.64	-24 +I	43.00	6.37	+ 2 -8	23.36	15.31	+23 -3
16	29.83	44.42	-15 +6	44.93	55.01	-24 -I	42.61	6.72	+11 -7	22.44	15.54	+23 0
17	30.57	44.75	-22 +3	{ 45.16 45.38	55.38 55.76	-20 -41 -15 -71	42.21	7.06	+19 -5	21.50	15.77	+17 +3
18	31.29	45.07	-25 0	45.57	56.13	- 5 -8	41.79	7.40	+23 -2	20.55	16.00	+ 8 +5
19	32.00	45.40	-25 -3	45.74	56.50	+ 5 -8	41.35	7.74	+21 +1	19.58	16.22	<b>-4</b> +6
20	32.69	45.73	-20 -6	45.89	56.87	+15 -7	40.89	8.07	+14 +3	18.60	16.43	-17 +5
21	33.37	46.06	-13 -8	46.03	57.25	+21 -5	40.41	8.40	+ 3 +5	17.61	16.64	-26 +3
22	34.03	46.40	- 3 -9	46.14	57.62	+22 -2	39.91	8.73	-11 +5	16.60	16.84	-29 0
23	34.68	46.74	+7-8	46.24	58.00	+18 +1	39.39	9.06	-22 +4	15.58	17.04	-26 -4
24	35.31	47.08	+17 -7	46.31	58.37	+10 +4	38.85	9.39	-29 +I	14.55	17.23	-17 -6
25	35.93	47-42	+23 -4	46.37	58.74	<b>−</b> 3 +5	38.29	9.71	-30 -2	13.50	17.42	- 3 -7
26	36.53	47.77	+22 0	46.41	59.11	-17 +5	37.72	10.03	-23 -5	12.45	17.60	+12 -6
27	37.11	48.11	+15 +3	46.42	59.49	-27 +3	37.12	10.34	-II -7	11.38	17.77	+24 -4
28	37.68	48.46	+ 4 +5	46.42	59.86	−3r o	36.51	10.65	+ 4 -7	10.30	17.94	+31 0
29	38.23	48.82	- 9 +6	46.40	60.23	-27 -3	35.88	10.96	+20 -5	9.21	18.10	+31 +3
30	38.76	49.17	-21 +5	46.36	60.60	-r <sub>7</sub> -6	35.22	11.26	+29 -2	8.11	18.26	+25 +6
31	39.28	49.52	-29 +2	46.30	60.97	- 2 -6	34.55	11.56	+33 +2	6.99	18.41	+15 +8
32				46.22	61.34	+12 -6				5.87	18.55	+ 2 +9
		δ	sec 8	to 8	δ	se	c δ   t	. o S	8	sec	δ   tg	8

 $\alpha_{1940.0} = r^h 42^m 34.16$ 

 $\delta_{1940.0} = +88^{\circ} 58' 44''.26$ 

#### Obere Kulmination Greenwich

Nc)	Grb	750	Cepheus	6 <sup>m</sup> 70
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Tag		Janua	r		Februa	ır		März			April	
Lag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		<del> -</del>	in		+	in		+	in
	4 <sup>h</sup> 17 <sup>m</sup>	85° 23′	0.01 0.01	4 <sup>h</sup> 16 <sup>m</sup>	85°23′	0.01 0.01	4 <sup>h</sup> 16 <sup>m</sup>	85° 23′	0.01 0.01	4 <sup>h</sup> 16 <sup>m</sup>	85° 23′	0.01 0.01
I	12.55	42.04	<b>−3</b> +6	67.15	48.95	-2 -5	59.80	50.67	+3 -6	52.37	46.93	+9 +2
2	12.44	42.33	-5 +3	66.92	49.10	+1 -6	59.54	50.64	+6 -5	52.17	46.73	+7 +4
3	12.32	42.61	-5 0	66.69	49.24	+4 -6	59.27	50.60	+8 -3	51.98	46.52	+5 +6
4	12.20	42.89	-4 -4	66.46	49.37	+65	59.01	50.55	+8 0	51.79	46.31	+2 +7
5	12.07	43.17	<b>-2 -6</b>	66.22	49.50	+7 -2	58.75	50.50	+8 +3	51.60	46.09	-ı +7
6	11.94	43.44	+1 -7	65.97	49.62	+8 +1	58.49	50.44	+6 +5	51.41	45.87	-4 +5
7	11.80	43.71	+4 -6	65.73	49.73	+7 +3	58.23	50.37	+4 +6	51.23	45.64	-6 +3
8	11.66	43.97	+6 -4	65.49	49.84	+5 +5	57.98	50.30	+1 +7	51.05	45.41	-7 0
9	11.52	44.23	+7 -1	65.24	49.95	+2 +6	57.72	50.22	<b>-2</b> +6	50.88	45.18	-7 -3
10	11.37	44.49	+7 +1	64.99	50.05	-r +7	57.47	50.14	-5 +5	50.71	44.95	-7 -5
II	11.22	44.74	+6 +4	64.75	50.14	-4 +6	57.21	50.05	<b>−7</b> +2	50.55	44.71	-5 -7
12	11.07	44.99	+4 +6	64.50	50.22	<b>−</b> 6 +4	56.96	49.96	—8 —ı	50.39	44-47	-2 -8
13	10.91	45.23	+1 +7	64.24	50.30	-8 +1	56.71	49.86	-8 -4	50.24	44.22	+1 -7
14	10.75	45.47	-2 +7	63.99	50.37	<b>−9 −2</b>	56.46	49.75	-7 -6	50.09	43.97	+3 -5
15	10.58	45.71	-5 +5	63.73	50.43	<b>−8 −5</b>	56.21	49.64	<b>−4</b> −8	49-94	43.72	+5 -2
16	10.41	45.94	-7 +3	63.47	50.49	-6 -7	55.97	49.52	-ı -8	49.80	43.46	+5 +2
17	10.23	46.17	−9 ∘	63.22	50.54	-3 -8	55.73	49.40	+2 -7	49.66	43.20	+3 +5
18	10.05	46.39	-9 -4	62.96	50.59	∘ −8	55.49	49.27	+4 -4	49.53	42.94	0 +7
19	9.86	46.61	-7 -6	62.70	50.63	+3 -6	55.25	49.13	+5 0	49.40	42.67	-3 +7
20	9.67	46.82	<del>-4 -8</del>	62.44	50.67	+5 -2	55.01	48.99	+4 +4	49.27	42.40	-5 +5
21	9.48	47.03	-r -9	62.18	50.70	+6 +2	54.77	48.85	+2 +7	49.15	42.13	-6 +2
22	9.29	47.23	+2 -7	61.92	50.72	+4 +6	54.54	48.70	-ı +8	49.03	41.86	-6 -2
23	9.09	47.42	+5 -4	61.65	50.74	+2 +8	54.31	48.55	<b>−3</b> +7	48.92	41.59	-4 -5
24	8.89	47.61	+6 0	61.38	50.75	_ı +8	54.08	48.39	<b>-5</b> +4	48.81	41.31	- <b>1</b> -6
25	8.68	47.80	+6 +4	61.12	50.75	<b>-4</b> +6	53.85	48.23	<b>−6</b> ∘	48.71	41.03	+3 -7
26	8.47	47.98	+4 +7	60.85	50.74	-5 +3	53.63	48.06	-5 -3	48.61	40.75	+6 -5
27	8.26	48.15	-+1 -+8	60.59	50.73	-5 -I	53.41	47.88	-2 -6	48.52	40.47	+8 -3
28	8.04	48.32	-2 +7	60.33	50.72	-3 -4	53.20	47.70	+1 -7	48.43	40.18	+9 0
29	7.82	48.49	-4 +5	60.06	50.70	∘ −6	52.99	47.52	+5 -6	48.35	39.90	+8 +3
30	7.60	48.65	-5 +I	59.80	50.67	+3 -6	52.78	47.33	+7 -4	48.27	39.61	+6 +6
31	7.38	48.80	-4 -2				52.57	47.13	+9 -1	48.20	39.32	+4 +7
32	7.15	48.95	-2 -5				52.37	46.93	+9 +2			

$$\alpha_{1040.0} = 4^h 16^m 52.60$$

$$\alpha_{1940.0} = 4^{\text{h}} \ 16^{\text{m}} \ 52.60$$
 $\delta_{1940.0} = +85^{\circ} \ 23' \ 37''.04$ 

#### Obere Kulmination Greenwich

			Nc) Grb 750 Cepheus 6 <sup>m</sup> .70									
Tag		Mai			Juni			Juli			Augus	t
145	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	4 <sup>h</sup> 16 <sup>m</sup>	85° 23′	0.01 0.01	4 <sup>h</sup> 16 <sup>m</sup>	85°23′	0.01 0.01	4 <sup>h</sup> 16 <sup>m</sup>	85°23′	0.01 0.01	4 <sup>h</sup> 17 <sup>m</sup>	85° 23′	0.01 0.01
1	48.20	39.32	+4 +7	48.40	30.06	-6 + 3	52.86	22.40	-7 -5	0.70	17.80	+2 -6
2	48.13	39.03	o +7	48.49	29.77	<i>−</i> 7 ∘	53.07	22.19	-5 -7	0.99	17.72	+5 -3
3	48.07	38.73	-3 +6	48.58	29.48	-7 -3	53.28	21.99	<u>−2</u> −8	1.28	17.65	+6 +1
4	48.01	38.43	-5 +4	48.67	29.19	-6 <b>-</b> 6	53.50	21.79	+1 -7	1.57	17.58	+5 +4
5	47.96	38.14	-7 +I	48.77	28.91	-3 -7	53.72	21.59	+4 -5	1.87	17.52	+3 +7
6	47.91	37.84	-7 -I	48.88	28.63	∘ −8	53.95	21.40	+6 -2	2.16	17.46	0 +8
7	47.87	37.54	-7 -4	48.99	28.35	+2 -6	54.18	21.21	+6 +2	2.46	17.40	-3 +7
8	47.83	37.24	-5 -6	49.10	28.07	+5 -3	54.41	21.02	+4 +5	2.75	17.35	-5 + <sub>4</sub>
9	47.79	36.94	<b>-3</b> −8	49.21	27.80	+6 0	54.64	20.84	+2 +7	3.05	17.30	-6 + 1
10	47.76	36.64	∘ −7	49-33	27.52	+5 +3	54.87	20.66	-ı +7	3.35	17.26	-5 <b>-</b> 2
11	47.74	36.34	+3 -6	49.46	27.25	+3 +6	55.11	20.48	-4 +6	3.65	17.22	<b>-2 -5</b>
12	47.72	36.03	+5 -3	49.59	26.98	o +7	55-35	20.31	-6 + 3	3.95	17.19	+1 -6
13	47.71	35.73	+5 +1	49.72	26.71	-3 + <sub>7</sub>	55.59	20.14	-6 -I	4.26	17.16	+4 -6
14	47.70	35.43	+4 +4	49.86	26.45	-5 +4	55.84	19.98	-4 -4	4.56	17.13	+6 -4
15	47.69	35.13	+2 +6	50.00	26.19	<b>−</b> 6 +1	56.09	19.82	<b>-2</b> -6	4.87	17.11	+8 -2
16	47.69	34.82	-ı +7	50.15	25.93	-6 -2	56.34	19.67	+1 -7	5.17	17.10	+8 +1
17	47.70	34.52	<b>-4</b> +6	50.30	25.67	-4 -5	56.60	19.52	+4 -6	5.48	17.09	+7 +4
18	47.71	34.22	-6 + 3	50.46	25.42	-I -7	56.85	19.38	+7 -4	5.78	17.09	+5 +6
19	47.73	33.91	-7 0	50.62	25.17	+3 -7	57.11	19.24	+-8 -I	6.09	17.09	+2 +7
20	47.75	33.61	-5 -4	50.79	24.92	+6 -5	57.37	19.10	+8 +2	6.39	17.10	-r +7
21	47.78	33.31	-3 -6	50.96	24.67	+8 -3	57.64	18.97	+6 +5	6.70	17.11	-4 +5
22	47.81	33.01	+1 -7	51.13	24.43	+8 0	57.91	18.84	+4 +6	7.01	17.13	-6 + <sub>3</sub>
23	47.85	32.71	±4 −6	51.31	24.19	+7 +3	58.18	18.72	+1 +7	7.32	17.15	-7 0
24	47-89	32.41	±7 −4	51.49	23.95	+5 +6	58.45	18.60	<b>−2</b> +6	7.63	17.17	<b>−8 −3</b>
25	47.93	32.11	+9 -1	51.67	23.72	+3 +7	58.73	18.48	-5 ±5	7.94	17.20	-7 -6
26	*)47.98	31.81	+9 +2	51.86	23.49	0 +7	59.00	18.37	-7 +2	8.25	17.24	-5 <b>-</b> 8
27	48.04	31.52	+7 +5	52.05	23.26	-3 +6	59.28	18.26	_8 <b>_1</b>	8.56	17.28	-2 <b>-</b> 9
28	48.10	31.23	+5 +7	52.25	23.04	-6 -4-4	59.56	18.16	-8 -4	8.87	17.32	+1 -8
29	48.17	30.93	+2 +7	52.45	22.82	_7 + <b>1</b>	59.84	18.06	-6 -7	9.18	17.36	+3 -5
30	48.24	30.64	-ı +7	52.65	22.61	<b>−8 −2</b>	60.12	17.97	-4 -8	9.49	17.41	+5 -2
31	48.32	30.35	-4 ÷5	52.86	22.40	-7 -5	60.41	17.88	0 -8	9.80	17.47	+5 +2
32	48.40	30.06	-6 + 3				60.70	17.80	+2 -6	10.11	17.53	+3 +5

 $<sup>\</sup>alpha_{1940.0} = 4^{h} 16^{m} 52.60$ 

 $<sup>\</sup>delta_{1940.0} = +85^{\circ} 23' 37'.04$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Mai 26.

Obere Kulmination Greenwich

Nc)	Grb	750	Cepheus	6 <sup>m</sup> 70
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	}	Septeml	per	Oktober		November		)er	Dezember			
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	Ait.		in	PATO.	1	in	AIL.		in	Att.		in
	4 <sup>h</sup> 17 <sup>m</sup>	+ 85°23′	0.01 0.01	4 <sup>h</sup> 17 <sup>m</sup>	85°23′	o.or o.or	4 <sup>h</sup> 17 <sup>m</sup>	+ 85°23′		4 <sup>h</sup> 17 <sup>m</sup>	85°23′	0.01 0.01
I	IO.II	17.53	+3 +5	19.01	21.48	<b>-4</b> +6	26.24	29.24	<b>-4 -5</b>	29.87	39.27	+7 -4
2	10.42	17.60	+1 +7	19.28	21.68	<b>-6</b> +4	26.42	29.54	-ı -7	29.91	39.61	+9 0
3	10.72	17.67	-2 +7	19.55	21.88	<b>−</b> 6 ∘	26.60	29.84	+3 -7	29.95	39.94	+9 +3
4	11.03	17.75	<del>-4</del> +6	19.82	22.09	-5 -3	26.77	30.15	+7 -5	29.98	40.28	+7 +6
5	11.34	17.83	<u>-6</u> -⊢3	20.09	22.30	-2 -6	26.94	30.45	+9 -2	30.01	40.62	+5 +7
6	11.65	17.92	-5 -r	20.35	22.51	+2 -6	27.11	30.76	+9 +1	30.03	40.95	+2 +8
7	11.95	18.01	-3 -4	20.61	22.73	+5 -6	27.27	31.07	+8 +4	30.04	41.29	-ı +7
8	12.26	18.10	∘ −6	20.87	22.95	+8 -4	27.43	31.38	+6 +6	30.05	41.62	-4 +5
9	12.56	18.20	+3 -6	21.13	23.17	+9 -I	27.58	31.69	+3 +8	30.06	41.96	-6 + 2
10	12.87	18.30	+6 -5	21.38	23.40	+9 +3	27.73	32.01	o +7	30.06	42.29	-6 -ı
11	13.17	18.41	+8 -3	21.63	23.63	+7 +5	27.87	32.33	-3 +6	30.05	42.62	-6 -4
12	13.48	18.52	+9 0	21.88	23.86	+5 +7	28.01	32.65	-5 +4	30.04	42.95	-5 -6
13	13.78	18.64	+8 +3	22.13	24.10	+2 +7	28.15	32.97	-6 +ı	30.03	43.28	-2 -7
14	14.08	18.76	+6 +6	22.37	24.34	-I +7	28.28	33.29	-6 -2	30.01	43.61	∘ −7
15	14.38	18.89	+3 +7	22.61	24.59	<b>-4</b> +5	28.41	33.61	-6 -5	29.98	43.93	+3 -6
16	14.68	19.02	0 +7	22.85	24.84	<b>−6</b> +2	28.53	33.94	-4 -7	29.95	44.26	+4 -3
17	14.98	19.15	-2 +6	23.09	25.09	<b>−</b> 6 ∘	28.65	34.27	-2 -7	29.92	44.59	+5 0
18	15.28	19.29	<b>-</b> 5 +4	23.32	25.35	-7 -3	28.76	34.59	+1 -7	29.88	44.91	+4 +3
19	15.57	19.43	-6 + 1	23.55	25.61	-6 -6	28.87	34.92	+3 -5	29.83	45.23	+3 +5
20	15.87	19.58	<b>−</b> 7 <b>−</b> 1	23.78	25.87	<del>-4</del> -7	28.98	35.25	+4 -3	29.78	45.55	0 +7
21	16.17	19.73	-7 -4	24.00	26.13	-ı -8	29.08	35.59	+5 +r	29.73	45.87	<b>−3</b> +6
22	16.46	19.89	-6 -7	24.22	26.40	+1 -7	29.18	35.92	+3 +4	29.67	46.18	-6 +4
23	16.75	20.05	-4 -8	24.44	26.67	+3 -4	29.27	36.25	+r +6	29.60	46.49	-7 +I
24	17.04	20.21	-r -8	24.65	26.95	+4 -1	29.36	36.59	-2 +7	29.53	46.80	-7 -2
25	17.32	20.38	+2 -7	24.86	27.23	+4 +2	29.44 29.52	36.92 37.25	-5 +51 -7 +31	29.45	47.11	-5 -5
26	17.61	20.55	+4 -4	25.07	27.51	+2 +5	29.59	37.59	<i>−</i> 7 °	29.37	47.42	-r -7
27	17.89	20.73	+5 0	25.27	27.79	0 +7	29.65	37.92	-6 -4	29.28	47.73	+2 -7
28	18.17	20.91	+4 +4	25.47	28.07	-3 +7	29.71	38.26	<b>−3 −6</b>	29.19	48.03	+6 -5
29	18.45	21.10	+2 +6	25.67	28.36	-6 + 5	29.77	38.60	+r <b>-</b> 7	29.09	48.33	+8 −2
30	18.73	21.29	-ı +7	25.86	28.65	<del>-7</del> +2	29.82	38.93	+4 -6	28.99	48.62	+9 +1
31	19.01	21.48	<b>-4</b> +6	26.05	28.94	-6 <b>-2</b>	29.87	39.27	+7 -4	28.88	48.91	+8 +4
32				26.24	29.24	<b>-4 -5</b>			3	28.77	49.20	+6 +7

 $\alpha_{1940,0} = 4^{h} 16^{m} 52.60$ 

 $\delta_{1940.0} = +85^{\circ}$  23' 37'.'04

#### Obere Kulmination Greenwich

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7771	~ +	Horr	Conhoi	-m 06	

		Janua	r		Februa	ır		März			Apri	 l
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		-+-	in		+	in
	7 <sup>h</sup> 13 <sup>m</sup>	87°8′	0.01 0.01	7 <sup>h</sup> 13 <sup>m</sup>	87°8′	0.01 0.01	7 <sup>h</sup> 13 <sup>m</sup>		0.01 0.01	7 <sup>h</sup> 13 <sup>m</sup>	87°8′	0.01 0.01
I	35.43	26.76	+ 6 +6	36.02	36.82	- 7 -3	29.22	44.35	- 2 -7	17.12	47.98	+12 -4
2	35.58	27.06	+ 1 +7	35.90	37.12	- 5 -6	28.89	44.55	+ 2 -8	16.70	48.00	+12 -1
3	35.73	27.37	- 3 +6	35.76	37.42	- 1 -7	28.55	44.75	+ 6 -8	16.27	48.02	+11 +1
4	35.87	27.68	- 7 ÷3	35.62	37.72	+ 38	28.20	44.94	+ro -6	15.85	48.03	+ 8 +4
5	36.00	27.99	-8 0	35.47	38.02	+ 7 -7	27.85	45.12	+11 -3	15.43	48.04	+ 4 +6
6	36.12	28.30	- 7 -4	35.31	38.31	+10 -5	27.50	45.30	+11 0	15.01	48.04	o +7
7	36.23	28.61	- 4 -6	35.14	38.60	+11 -2	27.14	45.47	+ 9 +3	14.59	48.03	- 4 +7
8	36.33	28.93	0 -8	34.96	38.89	+10 +1	26.78	45.64	+ 6 +5	14.16	48.01	<b>−</b> 8 +5
9	36.43	29.24	+ 4 -8	34.78	39.18	+ 8 +3	26.41	45.80	+ 3 +6	13.74	47.99	-11 +3
10	(36.51 (36.59	29.56 29.87	+ 8 -6 <sub>1</sub> + 10 -4	34.59	39.46	+ 5 +6	26.04	45.96	- 2 ±7	13.32	47.97	-12 0
II	36.65	30.19	+11 -1	34.39	39.74	+ 1 +7	25.66	46.11	- 6 +7	12.90	47.94	<b>—12</b> —2
12	36.71	30.51	+10 +2	34.18	40.02	- 4 ±7	25.28	46.26	-10 +5	12.48	47.90	- 9 -5
13	36.76	30.83	+7+5	33.96	40.29	<b>-</b> 9 +6	24.90	46.40	-13 +2	12.06	47.86	<b>-</b> 5 -6
14	36.80	31.15	+ 3 +6	33.73	40.56	-12 +4	24.51	46.54	-14 0	11.64	47.8I	0 -6
15	36.83	31.47	- I +8	33.50	40.83	-14 +1	24.12	46.67	-12 -3	11.23	47.76	44
16	36.85	31.79	- 6 + <sub>7</sub>	33.26	41.09	-14 <b>-</b> 2	23.73	46.79	- 8 -6	10.83	47.70	+ 7 -I
17	36.86	32.11	-10 +6	33.01	41.35	-11 <b>-</b> 5	23.33	46.91	- 3 -6	10.42	47.63	+ 8 +2
18	36.87	32.43	-13 +3	32.76	41.61	- 6 -6	22.93	47.02	+ 2 -5	10.01	47.55	+7+6
19	36.87	32.74	-14 0	32.50	41.86	∘ −6	22.53	47.13	+6 -3	9.61	47.47	+ 3 +7
20	36.86	33.06	-12 -4	32.24	42.11	+ 5 -5	22.12	47.23	+9 0	9.21	47-39	<b>- 2</b> +8
21	36.84	33.38	- 8 -6	31.97	42.35	+ 9 -2	21.71	47.33	+9+4	8.80	47.30	- 6 +6
22	36.81	33.70	- 3 -7	31.69	42.59	+10 +2	21.30	47.42	+ 6 +6	8.40	47.20	<b>−</b> 8 +2
23	36.77	34.01	+ 3 -6	31.40	42.83	+ 9 +5	20.89	47.50	+ 2 +8	8.01	47.10	— 8 —ı
24	36.72	34.33	+ 8 -4	31.11	43.06	+ 5 +7	20.48	47.58	- 3 +7	7.62	46.99	− 6 <b>−</b> 5
25	36.66	34.65	+11 0	30.81	43.29	+ r +7	20.06	47.65	<b>-</b> 6 +4	7.23	46.88	- 2 -7
26	36.59	34.97	+11 +3	30.50	43.51	- 4 +5	19.65	47.71	-8 o	6.84	46.76	+ 3 -8
27	36.52	35.28	+8+6	30.19	43.73	- 7 +2	19.23	47.77	-7-3	6.46	46.64	+ 7 -8
28	36.44	35-59	+ 4 +7	29.87	43.94	- 7 -I	18.81	47.82	-4 -6	6.08	46.51	+11 <b>−</b> 6
29	36.35	35.90	- I +7	29.55	44.15	<b>-6 -5  </b>	18.39	47.87	∘ -8	5.71	46.38	+13 -3
30	36.25	36.21	- 5 ±4	29.22	44.35	- 2 -7	17.97	47.91	+ 5 -8	5.34	46.24	+12 0
31	36.14	36.51	- 7 +I				17.54	47.95	+ 9 -7	4.98	46.09	+10 +3
32	36.02	36.82	-7-3				17.12	47.98	+12 -4			

30 | 20.053 | + 20.029 | 40 | 20.073 | + 20.048 | 50 | 20.093 | + 20.068

 $\alpha_{1940.0} = 7^{\text{h}} \, 13^{\text{m}} \, 7^{\text{s}}.74$   $\delta_{1940.0} = +87^{\circ} \, 8' \, 39^{\circ}.70$ 

Obere Kulmination Greenwich

Nd)	51	Hev.	Cephei	5 <sup>m</sup> 26
1100)	5±	110 4 1	Copilor	3.20

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Tag		Mai			Juni			Juli			Augus	t
145	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		- -	in
	7 <sup>h</sup> 12 <sup>m</sup>	87° 8′	0.01 0.01	7 <sup>h</sup> 12 <sup>m</sup>	87° 8′	0.01 0.01	7 <sup>h</sup> 12 <sup>m</sup>	87° 8′	0.01 0.01	7 <sup>h</sup> 12 <sup>m</sup>	87° 8′	0.01 0.01
I	64.98	46.09	+10 +3	56.29	39.42	- 5 +7	53.99	30.37	-I2 +I	58.48	20.70	- 2 -7
2	64.62	45.94	+ 6 +5	56.11	39.15	<b>-</b> 9 +5	54.03	30.05	-12 -2	58.73	20.41	+ 3 -6
3	64.27	45.79	+ 2 +6	55.93	38.87	-II +2	54.08	29.73	- 9 -5	58.99	20.12	+ 7 -3
4	63.92	45.63	- 2 +7	55.76	38.59	—12 o	54.13	29.41	-5 -6	59.26	19.83	+10 0
5	63.57	45.47	<b>−</b> 7 +6	55.60	38.31	-II -3	54.19	29.09	+ 1 -7	59.53	19.54	+10 +3
6	63.23	45.30	_10 +4	55.45	38.03	- 7 -6	54.26	28.77	+ 5 -5	59.81	19.26	+ 7 +6
7	62.89	45.12	-12 +I	55.30	37.74	<b>− 2 −7</b>	54.33	28.45	+ 9 -2	60.09	18.97	+ 3 +7
8	62.56	44.94	-12 -2	55.16	37.45	+ 2 -6	54.41	28.13	+10 +1	60.38	18.69	<b>- 2</b> +6
9	62.23	44.76	-IO -4	55.03	37.16	+7-4	54.50	27.81	+ 9 +4	60.67	18.41	- 6 + <sub>4</sub>
10	61.91	44.58	- 6 -6	54.91	36.87	+ 9 -1	*)54.60	27.50	+ 5 +7	60.97	18.13	- 8 +r
11	61.60	44.39	— I —6	54.79	36.58	+ 9 +3	54.70	27.18	0 +7	61.28	17.86	- 7 -3
12	61.29	44.19	+ 3 -5	54.68	36.28	+ 6 +6	54.81	26.86	<b>-</b> 4 +6	61.59	17.59	- 5 -6
13	60.98	43.99	+ 7 -3	54.58	35.98	+ 2 +7	54.93	26.54	- 8 +3	61.91	17.32	— r —8
14	60.68	43.79	+ 9 +1	54.48	35.68	- 2 +7	55.06	26.22	-9 0	62.24	17.06	+ 4 -8
15	60.38	43.58	+ 8 +4	54.39	35.37	<b>−</b> 7 +5	55.19	25.90	- 7 -4	62.57	16.80	+ 8 -7
16	60.09	43.37	+ 4 +7	54.31	35.07	- 9 +2	55.33	25.59	- 4 -6	62.90	16.54	+11 -4
17	59.81	43.15	0 +8	54.24	34.76	- 9 -1	55.48	25.28	∘ −8	63.24	16.28	+12 -2
18	59.53	42.93	- 5 +7	54.17	34.46	-7-5	55.63	24.96	+ 5 -8	63.59	16.02	+11 +1
19	59.26	42.70	- 8 + <sub>4</sub>	54.11	34.15	- 3 -7	55.79	24.65	+ 9 -6	63.94	15.77	+ 8 +4
20	58.99	42.47	- 9 +r	54.06	33.84	+ 2 -8	55.96	24.34	+11 -3	64.29	15.52	+ 5 +6
21	58.73	42.23	-8 -3	54.02	33.53	+ 7 -7	56.13	24.03	+11 0	64.65	15.28	0 +7
22	58.48	41.99	- 5 -6	53.98	33.22	+10 -5	56.31	23.72	+10 +3	65.02	15.04	<b>-4</b> +6
23	58.23	41.75	∘ −8	53.95	32.90	+12 -2	56.50	23.41	+ 7 +5	65.39	14.80	- 8 + <sub>5</sub>
24	57.99	41.50	+ 5 -8	53.93	32.59	+11 +1	56.69	23.10	+ 3 +7	65.77	14.56	-12 +3
25	57.75	41.25	+ 9 -7	53.92	32.27	+ 9 +3	56.89	22.79	- 2 +7	66.15	14.33	<b>−</b> 13 0
26	57.52	41.00	+12 -4	53.91	31.96	+ 6 +6	57.10	22.49	<b>-</b> 6 +6	66.53	14.10	-13 -2
27	57.30	40.74	+12 -1	53.91	31.64	+ 1 +7	57.31	22.19	-10 +4	66.92	13.87	-10 -5
28	57.09	40.48	+11 +2	53.92	31.32	- 4 +7	57.53	21.89	-I2 +2	67.31	13.65	- 66
29	56.88	40.22	+ 8 +5	53.94	31.00	- 8 +6	57.76	21.59	-13 -1	67.71	13.43	∘ −6
30	56.68	39.96	+ 4 +-6	53.96	30.69	-11 +3	57.99	21.29	-11 -4	68.11	13.21	+ 4 -4
31	56.48	39.69	- r +7	53.99	30.37	-12 +1	58.23	20.99	- 8 -6	68.52	13.00	+ 8 -r
32	56.29	39.42	- 5 +7				58.48	20.70	- 2 -7	68.93	12.79	+ 9 +2
			1 2 1					a 1			0 1 .	

δ	sec 8	$\operatorname{tg}\delta$	δ		sec δ	tg δ	δ	sec 8	tg δ
+87° 8′ 10′′	20,015	+ 19.990	+87°8	′ 30′′	20.053	+ 20,029	+87°8′40′′	20.073	+ 20.048
20	20.034	+ 20,009		40	20.073	+ 20.048	50	20.093	+ 20.068

 $\alpha_{1940.0} = 7^h \ \text{13}^m \ 7^{\text{1}}74$ 

 $\delta_{1940.0} = +87^{\circ} 8 39.70$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Juli 10.

#### Obere Kulmination Greenwich

Nd) 51 Hev. Cephei 5".26												
Tag		Septem	ber		Oktob			Novemb	oer		Dezeml	oer
-	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Gliede
		+	in		+	in		+	in		+	in
	7 <sup>h</sup> 13 <sup>m</sup>	87° 8′	0.01 0.01	7 <sup>h</sup> 13 <sup>m</sup>	87°8′	10.01	7 <sup>h</sup> 13 <sup>m</sup>	87° 8′	10.0	7 <sup>h</sup> 13 <sup>m</sup>	87°8′	0.01 0.0
I	8.93	12.79	+ 9 +2	22.85	8.31	+ 1 +8	38.53	8.02	- 9 -1	51.87	12.25	- 0 -8
2	9.35	12.58	+ 8 +5	23.35	8.23	- 4 + <sub>7</sub>	39.02	8.09	-6 -5	52.25	12.46	+ 6 -
3	9.77	12.38	+ 4 +7	23.85	8.16	- 7 + <sub>4</sub>	39.51	8.16	- 2 -7	52.62	12.68	+10 -
4	10.20	12.18	0 +8	24.35	8.09	- 9 +I	39.99	8.24	+ 4 -8	52.98	12.90	+13 -
5	10.63	11.98	- 5 +6	24.86	8.02	<b>−</b> 7 <b>−</b> 3	40.48	8.33	+ 9 -8	53.34	13.13	+13
6	11.06	11.79	<b>—</b> 8 +3	25.36	7.95	- 4 -6	40.96	8.42	+12 -5	53.69	13.36	+12 +
7	11.49	11.60	- 8 -ı	25.86	7.89	+ 1 -8	41.44	8.51	+14 -2	54.04	13.59	+8+
8	11.93	11.42	- 6 − <sub>5</sub>	26.37	7.84	+ 6 -8	41.92	8.61	+13 +1	54.38	13.83	+ 4 +0
9	12.37	11.24	- 2 -7	26.88	7.79	+10 -7	42.39	8.72	+10 +4	54.71	14.07	- I +
10	12.82	11.06	+ 3 -8	27.39	7.74	+13 -4	42.86	8.83	+ 6 +5	55.04	14.31	- 5 +
11	13.27	10.89	+ 7 -8	27.90	7.70	+13 -1	43.33	8.94	+ 2 +6	55.36	14.56	-9+
12	13.72	10.72	+11 -6	28.41	7.67	+11 +2	43.80	9.06	-3 +6	55.67	14.81	-11 +
13	14.18	10.55	+12 -3	28.92	7.64	+ 8 +4	44.26	9.19	- 7 +5	55.97	15.07	-II -
14	14.64	10.39	+12 0	29.43	7.61	+ 4 +6	44.72	9.32	- 9 +3	56.27	15.33	<b>-9-</b>
15	15.10	10.23	+10 +3	29.94	7.59	0 +6	45.18	9.45	-II 0	56.56	15.59	- 6 -
16	15.57	10.08	+ 6 +5	30.45	7.58	- 5 +6	45.63	9.59	-II -2	56.85	15.85	- 2 -
17	16.04	9.93	+ 2 +6	30.96	7.57	- 8 + <sub>4</sub>	46.08	9.74	<b>−</b> 9 <b>−</b> 4	57.13	16.12	+ 2 -
18	16.51	9.79	- 2 +6	31.47	7.56	-11 +2	46.52	9.89	-5 -6	57.40	16.39	+ 6 -
19	16.98	9.65	− 7 +6	31.98	7.56	-12 0	46.96	10.04	- I -6	57.66	16.67	+ 8
20	17.46	9.52	-10 +4	32.49	7.57	-11 -3	47.40	10.20	+ 3 -5	57.92	16.95	+8+
21	17.94	9.39	-12 +I	33.00	7.58	- 9 - 5	47.83	10.36	+ 6 -2	58.17	17.23	+ 5 +
22	18.42	9.26	-13 -1	33.51	7.59	- 5 -6	48.26	10.53	+8+1	58.41	17.51	+ 1 +
23	18.91	9.14	-11 -4	34.02	7.61	0 -6	48.68	10.71	÷ 7 ÷4	58.64	17.80	- 3 +
24	19.39	9.02	-8 -6	34.52	7.64	+ 4 -4	49.10	10.89	+ 3 +7	58.86	18.09	- 8 +
25	19.88	8.91	-3 -6	35.02	7.67	+ 7 -1	49.51	11.07	— r +8	59.07	18.38	-10 +
26	20.37	8.80	+ 2 -5	35.53	7.70	+ 7 +2	49.92	11.25	- 6 + <sub>7</sub>	59.28	18.68	-10 -
27	20.86	8.69	+ 6 -3	36.03	7.74	+ 5 +6	50.32	11.44	- 9 + <sub>4</sub>	59.48	18.98	-7-
28	21.35	8.59	+ 8 +1	36.53	7.79	+ 2 +8	50.71	11.64	-10 +1	59.67	19.28	- 3 -
29	21.85	8.49	+ 8 +4	37.03	7.84	- 3 +8	51.10	11.84	- 9 <b>-3</b>	59.86	19.58	+ 2 -
30	22.35	8.40	+ 5 +7	37.53	7.89	7 +6	51.49	12.04	- 5 -6	60.03	19.89	+8-
31	22.85	8.31	+ 1 +8	38.03	7.95	- 9 +3	51.87	12.25	∘ −8	60.20	20.19	+11 -
32				38.53	8.02	- 9 -I				60.36	20.49	+13 -

 $\alpha_{1940.0} = 7^h 13^m 7.74$ 

 $\delta_{1940.0} = +87^{\circ} 8' 39''7^{\circ}$ 

Obere Kulmination Greenwich

Ne)	I	Hev.	Draconis	4 <sup>m</sup> .58
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Tag	7000	Janua	r		Februa	ır		März			April	
rag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	u I	+	in		+	in		-+-	in		+	in
10.00	9 <sup>h</sup> 28 <sup>m</sup>	81° 35′	0.01 0.01	9 <sup>h</sup> 28 <sup>m</sup>	81° 35′	10.01	9 <sup>h</sup> 28 <sup>m</sup>	81° 35′	10.01	9 <sup>h</sup> 28 <sup>m</sup>	81° 35′	0.01 0.01
1	46.65	17.11	+3 +3	49.58	24.54	<b>-2</b> +3	49.77	33.65	<b>-2 -5</b>	47.38	41.65	+3 -8
2	46.78	17.29	+2 +5	49.63	24.83	<b>−3</b> ∘	49.73	33.95	-ı -8	47.27	41.85	+4 -6
3	46.91	17.47	0 +6	49.68	25.12	-3 -3	49.69	34.25	-⊢ı —9	47.15	42.04	+4 -3
4	47.04	17.66	-2 +5	49.72	25.42	-2 -6	49.64	34-55	+2 -8	47.03	42.23	+4 0
5	47.16	17.85	<b>−3</b> +2	49.76	25.72	-ı <del>-</del> 8	49.59	34.84	+3 -7	46.92	42.41	+3 +3
6	47.29	18.05	-3 -1	49.80	26.02	+ı —8	49.54	35.13	+4 -4	46.80	42.59	-r +6
7	47.41	18.25	-3 -4	49.84	26.32	+2 -7	49.49	35.42	+4 -1	46.68	42.76	o +7
8	47.53	18.46	-2 -6	49.87	26.62	+3 -5	49.43	35.70	+3 +2	46.56	42.93	-2 + <sub>7</sub>
9	47.64	18.67	0 -8	49.90	26.92	+4 -3	49.37	35.99	+2 +5	46.44	43.10	-3 +6
10	47.75	18.88	+ı —8	49.93	27.22	+4 0	49.31	36.27	+1 +7	46.32	43.26	<del>-4</del> +5
II	47.86	19.10	+3 -7	49.95	27.53	+3 +3	49.25	36.55	-ı +8	46.20	43.41	<b>−5</b> +2
12	47.97	19.32	+3 -4	49.97	27.84	+2 +6	49.18	36.83	-3 + 8	46.07	43.56	-4 -I
13	48.08	19.55	+4 -2	1 49.99 1 50.00	28.14	$\begin{array}{c c} 0 & +7 \\ -2 & +8 \end{array}$	49.11	37.11	-4 +7	45.95	43.70	-3 -3
14	48.18	19.78	+3 +1	50.01	28.76	-4 +8	49.04	37.38	-5 +5	45.82	43.84	-ı5
15	48.28	20.02	+2 +4	50.02	29.07	<b>−5</b> +6	48.97	37.65	-5 +r	45.70	43.97	+1 -5
16	48.38	20.26	+1 +7	50.03	29.38	-5 +3	48.90	37.91	-4 -1	45.57	44.09	+2 -4
17	48.48	20.50	-ı +8	50.03	29.69	−5 ∘	48.82	38.17	-2 -4	45.44	44.21	+4 -1
18	48.57	20.75	-3 + 8	50.03	30.00	-3 -3	48.74	38.43	o —5	45.31	44.33	+3 +2
19	48.66	21.00	-4 +7	50.02	30.31	-r -5	48.66	38.69	+2 -5	45.18	44.44	+2 +5
20	48.74	21.25	<u>-5</u> +5	50.01	30.62	+1 -6	48.57	38.94	+3 -3	45.05	44.54	+1 +7
21	48.83	21.51	-5 +I	50.00	30.92	+3 -5	48.48	39.19	+4 0	44.92	44.64	-ı +7
22	48.91	21.77	-4 -2	49.99	31.23	+4 -2	48.39	39.43	+3 +3	44.78	44.74	-2 +5
23	48.99	22.03	<b>-2 -5</b>	49.97	31.54	+4 +1	48.30	39.67	+2 +6	44.65	44.83	<b>-</b> 3 +2
24	49.07	22.30	0 -6	49.95	31.84	+3 +4	48.20	39.91	0 +7	44.52	44.91	-3 -2
25	49.14	22.57	+2 -6	49.93	32.14	+2 +6	48.11	40.14	—ı +6	44.38	44.99	-2 -5
26	49.21	22.84	+4 -4	49.91	32.45	0 +6	48.01	40.37	-3 +3	44.25	45.06	—ı —8
27	49.28	23.12	+4 -1	49.88	32.75	-2 +4	47.90	40.59	<b>-</b> 3 °	44.11	45.13	+ı −9
28	49.34	23.40	+4 +2	49.85	33.05	-3 + 1	47.80	40.81	-3 -4	43.98	45.19	+3 -8
29	49.40	23.68	+3 +5	49.81	33-35	<b>−3 −2</b>	47.70	41.03	-ı -7	43.84	45.24	+4 -7
30	49.46	23.96	+r +6	49.77	33.65	-2 <b>-</b> 5	47.59	41.24	∘ −9	43.71	45.29	+4 -4
31	49.52	24.25	-ı +5				47.48	41.45	+2 -9	43.57	45-33	+4 -r
32	49.58	24.54	-2 +3				47.38	41.65	+3 -8			

 $\alpha_{1940.0} = 9^{h} 28^{m} 41.70$ 

 $\delta_{1940,0} = +81^{\circ} 35' 39''16$ 

Obere Kulmination Greenwich

Ne)	I	Hev.	Draconis	4 <sup>m</sup> .58
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	ı	25.1		1		nev. Dra	I	4.58		1		
Tag		Mai			Juni			Juli			Augus	
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		-1-	in		+	in
	9 <sup>h</sup> 28 <sup>m</sup>	81°35′	10.01	9 <sup>h</sup> 28 <sup>m</sup>	81° 35′	0.01 0.01	9 <sup>h</sup> 28 <sup>m</sup>	81° 35′	0.01 0.01	9 <sup>h</sup> 28 <sup>m</sup>	81° 35′	10.0
1	43.57	45-33	+4 -1	39.55	43.87	0 +7	36.75	37.89	- <sub>4</sub> + <sub>5</sub>	35.71	28.57	-2 -5
2	43.44	45.37	+3 +2	39.43	43.74	-2 +7	36.69	37.63	-5 + <b>2</b>	35.71	28.24	∘ −6
3	43.30	45.40	+2 +5	39.31	43.60	-3 +6	36.63	37.37	-4 -ı	35.72	27.91	+2 -5
4	43.16	45.43	0 +6	39.20	43.46	-4 +4	36.57	37.10	-3 -4	35.72	27.58	+3 -4
5	43.03	45.45	<u>−ı</u> +7	39.09	43.31	-4 +I	36.51	36.83	-ı -6	35.73	27.24	+4 -I
6	42.89	45.46	-3 +7	38.98	43.16	-4 -2	36.45	36.55	+1 -6	35.74	26.91	+4 +2
7	42.76	45.47	-4 + <sub>5</sub>	38.87	43.00	-2 -4	36.40	36.27	+3 -5	35.75	26.57	+2 +5
8	42.62	45.47	<b>-4</b> +3	38.76	42.84	∘ −6	36.34	35.99	+4 -2	35.77	26.24	0 +6
9	42.49	45.47	-4 0	38.65	42.67	+2 -5	36.29	35.71	+4 +1	35.78	25.90	-ı +6
10	42.35	45.46	-3 -3	38.55	42.49	+3 -4	36.24	35.43	+3 +4	35.80	25.56	<b>−3</b> +4
II	42.22	45.45	-2 -5	38.45	42.31	+4 -1	36.19	35.14	+1 +6	35.82	25.22	-3 0
12	42.08	45.43	0 -5	38.35	42.13	+3 +2	36.15	34.85	o +6	35.84	24.88	-3 -3
13	41.95	45.40	+2 -5	38.25	41.94	+2 +5	36.11	34.56	<b>−2</b> +5	*)35.87	24.54	<b>-2</b> -6
14	41.81	45-37	+3 -2	38.15	41.75	o +7	36.07	34.27	-3 +3	35.90	24.20	∘ −8
15	41.68	45.33	+3 +1	38.05	41.55	-r +7	36.03	33-97	<b>−3</b> ∘	35.93	23.86	+ı —8
16	41.55	45.29	+3 +4	37.96	41.35	<u>−3</u> +5	36.00	33.67	-3 -4	35.97	23.52	+3 -7
17	41.41	45.24	+1 +6	37.87	41.15	-4 +2	35.96	33-37	-ı - <sub>7</sub>	36.00	23.18	+4 -5
18	41.28	45.18	o +7	37.78	40.94	-3 -2	35.93	33.06	∘ −8	36.04	22.84	+4 -3
19	41.15	45.12	<b>−2</b> +6	37.69	40.73	-2 - <sub>5</sub>	35.90	32.75	+2 -8	36.08	22.49	+4 0
20	41.02	45.06	-3 +4	37.60	40.52	-1 -7	35.87	32.44	+3 -7	36.12	22.15	+3 +3
21	40.89	44.99	-4 0	37.51	40.30	+1 -8	35.84	32.13	+4 -4	36.16	21.81	+1 +5
22	40.77	44.92	-3 -3	37.43	40.08	+3 -8	35.82	31.81	+4 -r	36.20	21.47	0 +7
23	40.64	44.84	-2 -7	37.35	39.85	+46	35.80	31.50	+3 +2	36.25	21.13	-2 +7
24	40.51	44.75	∘ −8	37.27	39.62	+4 -3	35.78	31.18	+2 +4	36.31	20.79	-4 +7
25	40.39	44.66	+2 -9	37.19	39.38	+4 0	35.77	30.86	+1 +6	36.36	20.45	<b>-4</b> +5
26	40.27	44.56	+3 -8	37.11	39.14	+3 +3	35.75	30.54	-r +8	36.41	20.11	-5 +2
27	40.14	44.46	+4 -5	37.04	38.90	+2 +5	35.74	30.21	-3 +7	36.47	19.77	-5I
28	40.02	44.35	+4 -2	36.96	38.65	0 +7	35.73	29.89	-4 +6	36.53	19.43	-3 -3
29	39.90	44.24	+4 +1	36.89	38.40	-2 +7	35.72	29.56	-5 ±4	36.58	19.10	-ı -5
30	39.78	44.12	+3 +4	36.82	38.15	-3 + <sub>7</sub>	35.72	29.23	-5 +I	36.64	18.76	+r -5
31	39.66	44.00	+1 +6	36.75	37.89	-4 +5	35.71	28.90	-4 -2	36.71	18.42	+3 -4
		43.87	0 +7					28.57	-2 -5	36.78	18.09	+4 -1
31 32	39.66			36.75	37.89	-4 +5	35.71				1	

 $<sup>\</sup>alpha_{1940.0} = 9^h 28^m 41.50$ 

 $<sup>\</sup>delta_{1940.0} = +81^{\circ} 35' 39''16$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Aug. 13.

Obere Kulmination Greenwich

_				1	Ve) I	Hev.	Dra	conis	4 <sup>m</sup> .58						
Tag		Septem	ber		Oktob	er			Noveml	oer			Dezemb	er	
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glied	er .	AR.	Dekl.	© Gli	eder	AR.	Dekl.	© Gli	eder
		+	in			in			+	i			+	i	
	9 <sup>h</sup> 28 <sup>m</sup>	81°35′	10.01	9 <sup>h</sup> 28 <sup>m</sup>	81°35′	0.01 0.	oī	9 <sup>h</sup> 28 <sup>m</sup>	81°34′	10.0	10.0	9 <sup>h</sup> 28 <sup>m</sup>	81°34′	0.01	0.01
ı	36.78	18.09	+4 -1	39.70	8.77	+2 +	-6	8 44.22	61.95	-4	+2	49.30	59.67	-т	-7
2	36.85	17.75	+4 +2	39.82	8.50	0 +	- 1	44.38	61.80	-3		49.47	59.68		-9
3	36.92	17.42	+3 +4	39-95	8.23	-2 +		44.55	61.65	-2	6	49.64	59.70	+2	-9
4	36.99	17.09	+1 +6	40.08	7.96	<b>-</b> 3 +	-3	44.71	61.51	—I	-8	49.81	59.72	+4	-7
5	37.07	16.76	0 +6	40.21	_7.69	-3	0	44.88	61.37	+1	-9	49.98	59.75	+5	-5
6	37.14	16.43	-2 +5	40.34	7.43	-3 -	-4	45.04	61.24	+3	<b>-</b> 9	50.14	59.78	+5	-2
7	37.22	16.10	-3 + 2	40.47	7.17	-ı -	1	45.21	61.11	+4	-7	50.30	59.82	_	+1
8	37.30	15.77	_3 <b>_2</b>	40.60	6.92	0 —	. 1	45.37	60.99	+5	-	50.47	59.87		+4
9	37.38	15.45	-2 -5	40.74	6.67	+2 -	-	45.54	60.87	+4	0	50.63	59.92		+6
10	37.47	15.12	-ı -8	40.87	6.42	+4 -	-8	45.71	60.76	+3	+2	50.80	59.98	-1	+6
II	37.56	14.79	+r -9	41.01	6.18	+4	-5	45.88	60.65	+2	+5	50.96	60.04	-2	+6
12	37.65	14.47	+3 -8	41.15	5.94	+4 -	-2	46.05	60.55	0	+6	51.12	60.11	-3	+5
13	37.74	14.16	+4 -7	41.29	5.70	+4 +	-I	46.22	60.46	<b>—</b> 1	+6	51.28	60.18		+3
14	37.83	13.84	+4 -4	41.44	5.47	+3 +	-3	46.39	60.37	-3	$\pm 6$	51.44	60.26	-4	0
15	37.93	13.52	+4 -1	41.58	5.24	+1 +	-5	46.56	60.28	-4	+4	51.60	60.34	-3	-3
16	38.02	13.21	+3 +2	41.73	5.01	0 +	-6	46.73	60.20	-4	- -2	51.75	60.43	-2	-4
17	38.12	12.90	+2 +4	41.87	4.79	-2 +	-6	46.91	60.13	-4	-r	51.91	60.53	0	-5
18	38.22	12.58	0 +6	42.02	4.57	-3 +	-6	47.08	60.06	-3	-3	52.07	60.63	+2	<b>-5</b>
19	38.32	12.27	—ı -⊦7	42.17	4.35	-4 +	-4	47.25	59.99	-2	<b>-5</b>	52.22	60.74	+3	-3
20	38.43	11.97	-3 ÷ <sub>7</sub>	42.32	4.14	-4 +	-I	47.42	59.93	0	<b>-</b> 5	52.38	60.86	+3	0
21	38.53	11.66	<b>-4</b> +6	42.47	3.93	-4 -	-1	47.59	59.88	+2	-4	52.53	60.98	+3	+3
22	38.64	11.36	-5 +4	42.63	3.73	-3 -	-3	47.77	59.83	+3	-2	52.67	61.10	+2	<b>+6</b>
23	38.75	11.06	—5 -⊢ı	42.78	3.53	-ı -	-5	47.94	59.79	+3	+1	52.82	61.23	0	+7
24	38.86	10.77	-4 -2	42.93	3.34	- - I	5	48.11	59.76	+2	+4	52.97	61.37	-2	+7
25	38.98	10.48	-2 -4	43.09	3.15	+2 -	3	48.28	59.73	+1	<del>+</del> 7	53.11	61.51	-3	-+6
26	39.09	10.19	∘ −5	43.25	2.97	+3		48.45	59.71	-r	+8	53.25	61.65	-4	+2
27	39.21	9.90	+2 -4	43.41	2.79	+3 +	_	48.62	59.69	-2	+7	53.40	61.80	-4	- <b>1</b>
28	39.33	9.61	+3 -2	43.57	2.61	+2 +	-6	48.79	59.68	-3	4	53.54	61.96	-2	<b>-5</b>
29	39.45	9.33	- -3 - -1	43.73	2.44	+1 +	7	48.96	59.67	-4	+1	53.67	62.13	—I	-8
30	39.57	9.05	+3 +4	43.89	2.27	-I +	7	49.13	59.67	-3	-4	53.81	62.30	+1	-8

8	sec 8	$\operatorname{tg}\delta$	δ		sec δ	$\operatorname{tg}\delta$	δ	sec 8	tg 8
+81° 34′ 50′′	6.830	+6.756	+81° 35′	0′′	6.832	+6.758	+81° 35′ 10′′	6.83.4	+6.761
60	6.832	+6.758		10	6.834	+6.761	20	6.836	+6.763

-3 + 5

+2 +6 | 44.05 | 2.11

44.22

1.95

8.77

31

32

39.70

49.30 59.67

53.94 62.47 54.07 62.64

 $<sup>\</sup>alpha_{1940.0} = 9^h 28^m 41.70$ 

 $<sup>\</sup>delta_{1940.0} = +81^{\circ} 35' 39.''16$ 

#### Obere Kulmination Greenwich

Tag		Janua	r		Februa	ır		März			April	
1 ag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR-	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	10h23m	82° 51′	0.01 0.01	10 <sup>h</sup> 24 <sup>m</sup>	82° 51′	0.01 0.01	10 <sup>h</sup> 24 <sup>m</sup>		0.01 0.01	10 <sup>h</sup> 23 <sup>m</sup>		10.0 10.0
I	59.37	31.36	+4 +2	3.70	37.30	-2 +4	5.12	46.22	-3 -4	63.38	55.33	+2 -9
2	59.54	31.47	+3 +4	3.80	37.56	-3 + 1	5.11	46.54	-2 -7	63.28	55.58	+4 -7
3	59.72	31.59	+1 +6	3.89	37.83	-4 -2	5.10	46.85	0 -8	63.18	55.83	+4 -4
4	59.89	31.71	-1 +5	3.98	38.10	-3 -5	5.09	47.17	+1 -9	63.07	56.08	+4 -1
5	60.05	31.84	-3 +4	4.07	38.37	-2 - <sub>7</sub>	5.07	47.48	+3 -7	62.96	56.32	+4 +2
6	60.22	31.98	-4 +I	4.15	38.65	o <b>–</b> 8	5.05	47.80	+4 -5	62.85	56.55	+2 +5
7	60.38	32.12	-4 -2	4.23	38.93	+2 -8	5.03	48.11	-4 -3	62.74	56.78	+1 +6
8	60.54	32.27	-3 -5	4.31	39.21	+3 -6	5.00	48.42	+4 0	62.62	57.01	-r +7
9	60.70	32.42	-I -7	4.38	39.50	+4 -4	4.97	48.73	+3 +3	62.50	57.24	<b>−3</b> +7
10	60.85	32.58	0 -8	4.45	39.78	-l-4 —I	4.93	49.04	<b>+2</b> +6	62.38	57.46	-4 +6
II	61.01	32.74	+2 -7	4.52	40.07	+4 +2	4.89	49.35	o +7	62.26	57.67	<u>-5</u> +4
12	61.16	32.91	+3 -5	4.58	40.36	+3 +5	4.85	49.66	<b>−2</b> +8	62.14	57.88	-5 +I
13	61.31	33.08	43	4.64	40.66	+1 +7	4.81	49.96	-4 +8	62.01	58.09	-4 -2
14	61.46	33.26	-1-4 0	4.70	40.96	-1 +8	4.76	50.27	<b>-5</b> +6	61.88	58.29	-2 -4
15	61.61	33.44	+3 +3	4.75	41.26	-3 +9	4.71	50.58	-5 +3	61.75	58.49	∘ −5
16	61.75	33.63	+2 +6	4.80	41.57	<b>-4</b> +8	4.65	50.88	<b>-</b> 5 0	61.62	58.68	+2 -4
17	61.89	33.83	0 +8	4.85	41.87	<b>-5</b> +5	4.59	51.18	-3 -3	61.49	58.87	+4 -2
18	62.03	34.03	-2 +9	4.89	42.17	<b>−</b> 5 +2	4.53	51.47	-1 -5	61.35	59.05	+4 + 1
19	62.17	34.24	<b>−4</b> +8	4.93	42.48	-4 -1	4.47	51.76	<b>⊹</b> 1 <b>−</b> 5	61.22	59.23	+3 +4
20	62.31	34.45	-5 +7	4.97	42.79	-2 -4	4.40	52.05	+3 -4	61.08	59.40	+2 +6
21	62.44	34.66	<b>-</b> 6 +3	5.00	43.10	o <b>-</b> 6	4.33	52.34	-1-4 —I	60.94	59-57	o +7
22	62.57	34.88	<b>-5</b> 0	5.03	43.41	+3 -5	4.26	52.63	+4 +2	60.80	59.73	<b>-2</b> +6
23	62.70	35.10	-3 -3	5.05	43.72	+4 -4	4.19	52.91	+3 +4	60.65	59.89	<b>-</b> 3 +3
24	62.82	35.33	—ı —6	5.07	44.03	+5 -1	4.11	53.19	+1 +6	60.50	60.04	-4 0
25	62.94	35.56	+2 -6	5.09	44.34	+4 +2	4.03	53.47	-1 +6	60.36	60.19	<del>-3</del> -4
26	63.06	35.80	+4 -5	5.10	44.66	+3 +4	3.95	53.75	-3 +4	60.21	60.33	-2 -7
27	63.17	36.04	+5 -3	5.11	<b>44.97</b> 45.28	0 + 5 $-2 + 4$	3.86	54.02	-4 +ı	60.06	60.46	∘ −9
28	63.28	36.28	+5 0	5.12	45.60	-3 + 2	3.77	54.29	<b>-4 -3</b>	59.91	60.59	<b>+2</b> −9
29	63.39	36.53	+4 +3	5.12	45.91	-4 -I	3.68	54.56	-3 -6	59.76	60.72	+3 -8
30	63.50	36.78	+2 +5	5.12	46.22	-3 -4	3.58	54.82	-ı -8	59.61	60.84	+4 -6
31	63.60	37.04	0 +5				3.48	55.08	+1 -9	59.46	60.95	+4 -3
32	63.70	37.30	-2 +4				3.38	55.33	+2 -9			

 $\alpha_{1940.0} = 10^{h} 23^{m} 56.58$ 

 $\delta_{1940.0} = +82^{\circ} 51' 55''08$ 

#### Obere Kulmination Greenwich

	Nf) 30 Hev. Camelopardalis 5,34  Tag Mai Juni Juli August													
Tag		Mai				J <b>u</b> ni				Juli		1111	Augus	t
5	AR.	Dekl.	© Glie	der	AR.	Dekl.	C Glie	der	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in			+	in			+	in		+	in
	10 <sup>h</sup> 23 <sup>m</sup>	82° 52′	0.01	10.01	10 <sup>h</sup> 23 <sup>m</sup>	82° 51′	0.01	0.01	10 <sup>h</sup> 23 <sup>m</sup>	82° 51′	10.0 10.0	10h23m	82° 51′	0.01 0.01
I	59.46	0.95	+4 -	<b>-</b> 3	54.57	61.69	0	+7	50.48	57.40	<del>-4</del> +6	47.98	48".94	-3 -3
2	59.30	1.06	+4	0	54.42	61.62	-2	,	50.37	57.18	-5 +4	47.94	48.62	-I -5
3	59.15	1.17		+3	54.26	61.55		+7	50.26	56.96	-5 +I	47.90	48.29	+2 -6
4	58.99	1.27	+1 -	+6	54.11	61.47	-4	+5	50.15	56.74	-4 -2	47.86	47.97	+3 -4
5	58.84	1.36	0 -	+7	53.96	61.38	-5	+2	50.05	56.51	-2 -5	47.82	47.64	+4 -2
6	58.68	1.45	-2 -	+7	53.81	61.29	-4	0	49.94	56.27	0 -6	47.78	47.31	+4 +1
7	58.53	1.53	-4 -	+6	53.67	61.20	-3	-3	49.84	56.03	+2 -6	47.75	46.98	+3 +4
8	58.37	1.60	-4	+4	53.52	61.10	-1	<b>-5</b>	49.74	55.79	+4 -4	47.72	46.64	+1 +5
9	58.21	1.67	-5 -	+2	53.37	60.99	+1	-6	49.64	55.55	+5 -1	47.69	46.31	-ı +6
10	58.05	1.73	-4	_r	53.23	60.88	+3	-5	49.55	55.30	+4 +2	47.67	45.97	-2 +4
11	57.90	1.79	-2 -	-4	53.08	60.77	+4	-2	49.45	55.04	+2 +5	47.65	45.63	-4 +2
12	57.74	1.84	0 -	-5	52.94	60.65	+4		49.36	54.78	0 +6	47.63	45.29	-4 -2
13	57.58	1.89	+2 -	-5	52.80	60.52	+3		49.27	54.52	-2 +6	47.61	44.94	-3 -5
14	57.42	1.93	+3 -	-3	52.66	60.39	+1		49.18	54.26	-3 + 4	47.60	44.60	-r -7
15	57.26	1.97	+4 -	_I	52.52	60.25	—ı	<del>+</del> 7	49.10	53.99	-4 +1	47.59	44.25	+1 -8
16	57.10	2.00	+4 -	+3	52.38	60.11	-2	+6	49.02	53.72	<del>-4</del> -2	47.58	43.90	+2 -8
17	56.94	2.02	+2 -	+5	52.25	59.96	-4	+3	48.94	53.44	<b>-2</b> -5	47.57	43.56	+3 -6
18	56.78	2.04	0 -	+7	52.11	59.81	-4	0	48.86	53.16	-ı - <sub>7</sub>	47.56	43.21	+4 -4
19	56.62	2.05	-2	+7	51.98	59.65	-3	-4	48.78	52.88	+1 <del>-8</del>	47.56	42.86	+4 -1
20	56.46	2.06	-3 -	+5	51.84	59.49	-2	<b>-</b> 7	48.70	52.59	+3 -7	47.56	42.51	+4 +2
21	56.30	2.06	-4 -	+2	51.71	59.32	0	-8	48.63	52.30	+4 -6	47.57	42.15	+2 +4
22	56.14	2.05	-4 -	-2	51.58	59.15	+2	-8	48.56	52.01	+4 -3	47.57	41.79	+1 +7
23	55.98	2.04	-3 -	5	51.45	58.97	+3	-7	48.49	51.72	-1-4 0	47.58	41.44	-ı +8
24	55.82	2.02	-ı -	-8	51.32	58.79	+4	-5	48.42	51.42	-1-3 +-3	47.59	41.08	<b>−3</b> +8
25	55.67	2.00	+1 -	-9	51.20	58.60	+4	-2	48.36	51.12	26	47.60	40.73	-4 + <sub>7</sub>
26	55.51	1.97	+3 -	-8	51.07	58.41	+4	+1	48.30	50.82	0 +7	47.62	40.37	-5 +4
27	55.35	1.94	+4 -	-7	50.95	58.22	-+-3	+4	48.24	50.51	-2 +8	*)47.64	40.01	<u>-5</u> +1
28	55.20	1.90	+5 -		50.83	58.02		+6	48.18	50.20	<b>-4</b> ±7	47.66	39.65	-4 -2
29	55.04	1.86	+4 -		50.71	57.82	—I	+8	48.12	49.89	<u>-5</u> +5	47.68	39.30	-2 -4
30	54.88	1.81	+4 -	+2	50.60	57.61	-3	-1-8	48.07	49.58	-5 +3	47.71	38.94	∘ −5
31	54.73	1.75	+2 -	+5	50.48	57.40	-4	-1 6	48.02	49.26	_5 o	47.74	38.58	
32	54.57	1.69	0 -	-		3			47.98	48.94	-3 -3	47.77	38.22	+4 -3
	, 0, 5,		·							. 9				

 $\alpha_{1940.0} = 10^{h} 23^{m} 56.58$ 

 $\delta_{1940.0} = +82^{\circ} 51' 55!'08$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Aug. 27.

### Obere Kulmination Greenwich

$N_f$ )	30	Hev.	Camelopardalis	5 <sup>m</sup> 34
	J-			J·JT

Tag		Septem	ber		Oktob	er		Novem	ber		Dezeml	er
Tug	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		-+-	in		-+-	in		+	in
,	10 <sup>h</sup> 23 <sup>m</sup>	82° 51′	0.01 0.01	10 <sup>h</sup> 23 <sup>m</sup>	82°51′	0.01 0.01	10 <sup>h</sup> 23 <sup>m</sup>	82°51′	0.01   0.01	10 <sup>h</sup> 23 <sup>m</sup>	82°51′	0.01 0.01
I	47.77	38.22	+4 -3	49.87	27.71	+3 +5	54.17	18.85	-4 +3	59.72	14.19	· <b>-</b> 3 -6
2	47.80	37.86	+5 0	49.98	27.38	+ı +6	54.34	18.63	<b>−4</b> ∘	59.91	14.12	—ı —8
3	47.84	37.50	+-4 +-3	50.10	27.05	<b>−</b> 1 +6	54.51	18.41	-3 -4	60.11	14.06	+ı −9
4	47.88	37.14	+2 +5	50.21	26.72	-3 +4	54.69	18.19	-2 -7	60.31	14.00	+3 -9
5	47.92	36.78	0 +6	50.32	26.40	-4 +1	54.86	17.97	○ -9	60.50	13.95	+4 -7
6	47.97	36.42	-2 +5	50.44	26.08	-4 -3	55.03	17.76	+2 -9	60.70	13.90	+5 -4
7	48.02	36.06	-3 +3	50.56	25.76	-2 <b>-</b> 6	55.21	17.56	+48	60.90	13.86	-+5 0
8	48.07	35.71	-4 -r	50.67	25.45	-ı -9	55.38	17.36	+5 -5	61.09	13.83	+3 +2
9	48.12	35.35	<b>−3 −4</b>	50.79	25.14	+1 -9	55.56	17.16	+5 -2	61.29	13.80	+2 +5
10	48.17	34.99	-2 -7	50.92	24.83	+3 -9	55.74	16.97	+4 +1	61.48	13.78	0 +6
II	48.22	34.63	0 -9	51.05	24.52	+4 -7	55.92	16.78	+3 +3	61.68	13.76	<b>−2</b> +6
12	48.28	34.27	+2 -9	51.18	24.22	+5 -4	56.10	16.60	+1 +5	61.87	13.75	-3 +6
13	48.34	33.91	+3 -7	51.31	23.92	+4 <b>-</b> 1	56.28	16.43	-r +6	62.07	13.75	<b>-</b> 4 +4
14	48.41	33.56	+4 -5	51.44	23.62	+3 +2	56.47	16.26	-2 +6	62.26	13.76	-5 +2
15	48.48	33.21	+4 -2	51.58	23.32	+2 +4	56.65	16.09	-4 +5	62.45	13.77	-4 -I
16	48.55	32.85	+4 +1	51.71	23.03	0 +6	56.83	15.93	-5 ÷3	62.64	13.78	-3 -3
17	48.62	32.50	+3 +3	51.85	22.74	-I +7	57.02	15.78	-4 +I	62.84	13.80	-r -5
18	48.69	32.15	+1 +6	51.99	22.46	-3 +7	57.21	15.63	-4 -I	63.03	13.83	+1 -5
19	48.77	31.80	o +7	52.13	22.18	-4 +5	57.40	15.48	-2 -4	63.22	13.86	+3 -4
20	48.85	31.45	-2 +7	52.28	21.90	<b>−5</b> +3	57.59	15.34	0 -5	63.41	13.90	+4 -2
21	48.93	31.10	-4 -1-7	52.43	21.62	-5 +1	57.78	15.21	+2 -4	63.60	13.95	+4 I
22	49.01	30.75	-5 +5	52.58	21.35	-4 -2	57.98	15.08	+3 -3	63.79	14.00	+3 +4
23	49.10	30.41	-5 +3	52.73	21.08	-2 -4	58.17	14.96	-1-4 0	63.97	14.06	+1 +7
24	49.19	30.06	−5 ∘	52.88	20.82	○ -4	58.36	14.84	+4 +3	64.16	14.13	-r +7
25	49.28	29.72	-3 -3	53.04	20.56	+2 -4	58.55	14.73	+2 +6	64.34	14.20	-3 +6
26	49.37	29.38	-r -4	53.19	20.30	+3 -2	58.75	14.63	0 +8	64.53	14.28	-4 +4
27	49.46	29.04	- -r —4	53.35	20.05	+4 +1	58.94	14.53	-2 +7	64.71	14.36	<b>-4</b> °
28	49.56	28.71	+3 -3	53.51	19.80	-1-3 -1-4	59.14	14.44	-3 + 5	64.89	14.45	-3 $-4$
29	49.66	28.37	+4 -I	53.67	19.56	+1 +7	59.33	14.35	-4 +2	65.07	14.54	-2 -7
30	49.77	28.04	+4 +2	53.84	19.32	o +7	59.52	14.27	-4 -2	65.25	14.64	0 -8
31	49.87	27.71	+3 +5	54.00	19.08	-2 +6	59.72	14.19	-3 -6	65.43	14.75	+2 -9
32				54.17	18.85	-4 +3				65.60	14.86	+4 -7

δ	sec 8	tg δ	δ	sec 8	tg δ	8	sec 8	tg 8
+82° 51′ 10′′	8.037	+7.975	+82° 51′ 20′′	8.040	+7.978	+82° 51′ 30″	8.044	+7.981
20	8,040	+7.978	30	8,044	+7.981	40	8.017	+7.984

 $\alpha_{1940.0} = 10^{h} 23^{m} 56.58$ 

 $\delta_{1940.0} = +82^{\circ} 51' 55.08$ 

Obere Kulmination Greenwich

Ng) & Ursae minoris 4 <sup>m</sup> 40	(g) €	: Ursae	e minoris	4 <sup>m</sup> 40
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Tag		Janua	r		Februa	r		März			April	
rag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Gliede	r AR.	Dekl.	© Glieder	AR.	Dekl.	C Glieder
		+	in		+	in		-+-	in		+	in
	16 <sup>h</sup> 51 <sup>m</sup>	82° 8′	0.01 0.01	16h51m	82° 8′	0.01	16 <sup>h</sup> 51 <sup>n</sup>	82° 8′	10.0	16 <sup>h</sup> 52 <sup>m</sup>	82° 8′	10.01
1	51.30	19.03	+1 -7	54.32	10.30	+ 1+	3 58.73	6.67	-r +7	3.56	8.81	-3 +1
2	51.36	18.70	+2 -5	54.45	10.09	0 +	6 58.90	6.64	-2 +7	3.70	8.98	-3 -2
3	51.42	18.37	+2 -2	54.59	9.88	-ı +	7 59.06	6.62	-3 +5	3.84	9.15	-2 -4
4	51.48	18.04	+2 +1	54.73	9.68	-2 +	6 59.23	6.61	-3 + 3	3.98	9.33	-ı -6
5	51.55	17.71	+1 +5	54.87	9.49	<b>-2</b> +	5 59-39	6.60	<u>-3</u> ∘	4.12	9.51	∘ −7
6	51.62	17.38	0 +7	55.01	9.30	-3 +	0,00	6.60	-2 -3	4.25	9.70	+r -6
7	51.69	17.06	-ı +7	55.15	9.12	-2 <b>-</b>	, ,	6.60	-I -5	4.38	9.89	+2 -5
8	51.77	16.74	-2 +6	55.29	8.95	-2 <b>-</b>	- 000	6.61	-1 -6	4.51	10.09	+2 -3
9	51.85	16.43	<b>−3</b> +4	55.44	8.78	-1 -	·   '		○ -7	4.64	10.29	+3 0
10	51.93	16.12	-3 + 1	55.58	8.61	0 —	7 60.20	6.66	+1 -6	4.77	10.50	+2 +3
II	52.01	15.81	-2 -2	55.73	8.45	r	7 60.36	6.69	+2 -4	4.89	10.71	+2 +5
12	52.09	15.51	-2 -4	55.88	8.30	+2 -	5 60.52	6.73	+-32	5.01	10.93	+1 +7
13	52.18	15.21	-r -6	56.03	8.16	+2 -	3 60.68	6.77	3I	5.13	11.15	0 +8
14	52.27	14.91	○ -7	56.19	8.02	+3 -	1 60.84	6.82	24	5.25	11.38	<b>−1</b> +6
15	52.37	14.62	+1 -7	56.34	7.89	+-3 +	2 61.00	6.88	- -2 - -6	5.37	11.61	-1 +4
16	52.46	14.33	+2 -5	56.50	7.77	+2 +	~	6.95	8-+ 1	5.48	11.84	-2 0
17	52.56	14.04	+3 -3	56.65	7.65	+1 +			0 +8	5.58	12.08	-ı -3
18	52.66	13.76	+3 +1	56.80	7.54	0 +	1 .,		—ı -⊦-6	5.69	12.33	0 -6
19	52.76	13.48	+3 +4	56.96	7.43	—ı +	7 61.62	7.18	-2 - -2	5.80	12.58	+I -7
20	52.87	13.21	+2 +6	57.12	7.33	-2 +	5 61.78	7.27	-2 -I	5.90	12.83	+2 -7
21	52.98	12.94	+1 +8	57.28	7.23	-2 +	1 61.93	7.37	-r -5	6.00	13.08	+2 -5
22	53.09	12.68	0 +8	57.44	7.14	-2 <b>-</b>	3 62.09		○ -7	6.11	13.34	- -2 —I
23	53.20	12.42	—r +6	57.60	7.06	—ı —	6 62.24	7.58	+1 -8	6.21	13.61	23
24	53.32	12.16	-2 +2	57.76	6.98	0 -	8 62.40	7.69	-⊦2 <b>-</b> 6	6.30	13.88	-+1 -+5
25	53.44	11.91	-2 -2	57.92	6.91	+1 -	7 62.55	7.81	+-2 -3	6.39	14.15	-1 +7
26	53.56	11.66	-2 -5	58.08	6.85	+2 -	-   -		+2 0	6.48	14.43	-2 +7
27	53.68	11.42	-ı -8	58.25	6.80	+2 -			+1 +4	6.57	14.71	-3 +5
28	53.81	11.19	∘ −8	58.41	6.75	+1 +	2 62.99		o +6	6.66	14.99	-3 +2
29	53.93	10.96	+r -7	58.57	6.71	0 +	-   0 .		-ı +7	6.74	15.27	-3 -1
30	54.06	10.73	+2 -4	58.73	6.67	I +	7 63.28	8.50	<b>−2</b> +6	6.82	15.56	-2 -4
31	54.19	10.51	+2 0				63.42	8.65	-3 +4	6.90	15.85	<b>-2</b> -6
32	54.32	10.30	+1 +3				63.56	8.81	<u>-3</u> +1			

 $\alpha_{1940.0} = 16^{\text{h}} 52^{\text{m}} 2.49$   $\delta_{1940.0} = +82^{\circ} 8' 20.453$ 

Obere Kulmination Greenwich

					j	Ng) ε	Ursa	e m	inoris	4 <sup>m</sup> 40						
Tag		Mai				Juni				Juli				Augus	t	
146	AR.	Dekl.	C GI	ieder	AR.	Dekl.	© Gli	eder	AR.	Dekl.	© Gli	eder	AR.	Dekl.	C GI	ieder
		+	i	n		+	i	n.		+	i	n		+	i	n
	16 <sup>h</sup> 52 <sup>m</sup>	82° 8′	10.0	0.01	16 <sup>h</sup> 52 <sup>m</sup>	82° 8′	0.01	10.0	16 <sup>h</sup> 52 <sup>m</sup>	82° 8′	10.0	10,01	16 <sup>h</sup> 51 <sup>m</sup>	82° 8′	10.0	0.01
I	6.90	15.85	-2	-6	7.94	25.66	+2	-5	6.37	35.11	+2	+5	62.60	41.76	—r	+6
2	6.97	16.14	_r	-7	7.93	25.99	+2	2	6.28	35.38	- -1	+7	62.45	41.91	·—2	+2
3	7.04	16.43	0	-7	7.92	26.31	+3		6.19	35.65	0	+8	62.30	42.05	-2	- <b>1</b>
4	7.11	16.73	+1	6	7.90	26.64 26.96	+2 +1	$+31 \\ +61$	6.09	35.91	-1	+7	62.14	42.19	-1	-5
5	7.18	17.03	+2	-4	7.86	27.28	+1	,	5.99	36.17	-2	+4	61.99	42.32	0	-7
6	7.24	17.33	+2	-1	7.84	27.61	0	+7	5.89	36.43	-2	+1	61.83	42.45	0	-8
7	7.30	17.64	+2	+2	7.81	27.93	-1	+6	5.79	36.68	-2	-3	61.68	42.58	- <del>-</del> -1	-6
8	7.36	17.94	+2	+5	7.78	28.25	-2	+3	5.68	36.93	-1	6	61.52	42.70	+2	-3
9	7.42	18.25	+1	+6	7.75	28.57	-2	-1	5.58	37.18	0	-7	61.36	42.82	+2	0
10	7.47	18.56	. 0	+7	7.71	28.89	—I	-4	5.47	37.42	+1	-7	61.20	42.93	- -1	<b>⊣</b> -3
11	7.52	18.87	1	+7	7.67	29.20	0	-6	5.36	37.66	- -2	-5	61.04	43.04	0	+6
12	7.57	19.18	-1	+5	7.63	29.52	- - I	-7	5.25	37.89	+2	-2	60.88	43.14	I	+7
13	7.62	19.50	-2	+2	7.59	29.84	- <b> -2</b>	6	5.14	38.12	- -2	- -2	60.72	43.24	-2	$\pm 6$
14	7.66	19.82	—I	-2	7.54	30.15	+2	-4	5.02	38.35	1	+5	60.55	43.33	-3	+4
15	7.70	20.14	-1	<b>-</b> 5	7.49	30.45	- -2	0	4.90	38.57	0	±7	60.39	43.42	-3	1+
16	7.74	20.46	0	-7	7.44	30.76	- -2	3	4.78	38.79	-1	-1-7	60.22	43.50	-3	-2
17	7.77	20.78	+1	-7	7.39	31.07	-i- I	+6	4.65	39.01	-2	+-6	60.06	43.58	2	-4
18	7.80	21.10	+2	-6	7.33	31.37	0	+7	4.53	39.22	-3	-1-3	59.89	43.65	-1	-6
19	7.83	21.42	+2	-3	7.27	31.67	-1	-1-7	4.40	39.43	-3	0	59.72	43.71	0	<b>-</b> 7
20	7.86	21.74	+2	+1	7.21	31.98	-2	+-5	4.27	39.63	-2	-3	59.55	43.77	- - <b>I</b>	-6
21	7.88	22.07	+1	+4	7.15	32.28	-3	2	4.14	39.83	-2	-5	59.38	43.83	+2	-5
22	7.90	22.40	0	+7	7.08	32.57	-3	-r	4.01	40.03	—I	-6	59.21	43.88	2	-3
23	7.92	22.72	-1	+7	7.01	32.86	-2	-4	3.87	40.22	0	-7	59.04	43.93	+3	0
24	7.93	23.05	-2	+6	6.94	33.15	-I	-6	3.74	40.41	- - I	<del>-6</del>	58.86	43.97	+3	3
25	7.94	23.38	-3	+4	6.87	33.44	0	-7	3.60	40.59	+2	-4	58.69	44.01	+2	+-6
26	7.95	23.70	-3	+1	6.79	33.73	+1	-7	3.46	40.77	+3	-2	58.52	44.04	+1	+7
27	7.96	24.03	-3	-2	6.71	34.01	+2	-6	3.32	40.95	+3	+1	58.35	44.07	0	- -8
28	7.96	24.36	-2	-5	6.63	34.29	+2	-3	3.18	41.12	2	-1-4	58.17	44.09	—т	+7
29	7.96	24.68	1	-7	6.55	34.57	+3	—r	3.03	41.29	+2	-1-7	58.00	44.11	-ı	+4
30	7.96	25.01	0	-7	6.46	34.84	+2	+3	2.89	41.45	+-1	+8	57.82	44.12	-2	+1
31	7.95	25.34	+1	-7	6.37	35.11	+2	+5	2.75	41.61	0	+8	57.65	44.13	-1	-3
32	7.94	25.66	⊣-2	-5					2.60	41.76	-r	+6	57.47	44.13	-1	-6
									-						10	

 $|\sec \delta|$   $|\sec \delta|$   $|\sec \delta|$   $|\sec \delta|$ sec δ tg δ  $+82^{\circ}$  8' 10" 7.309 +7.240  $+82^{\circ}$  8' 30" 7.314 +7.245  $+82^{\circ}$  8' 40" 7.317 +7.24820 7.311 +7.243 40 7.317 +7.248 50 7.319 +7.250

 $\alpha_{1940.0} = 16^{h} 52^{m} 2.49$   $\delta_{1940.0} = +82^{\circ} 8' 20.753$ 

31

32

### Scheinbare Sternörter 1940

#### Obere Kulmination Greenwich

				1	<i>Vg)</i> ε	Ursae mi	noris	4 <sup>m</sup> .40				
Tag		Septem	ber		Oktob	er		Novem	ber		Dezemb	er
rag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	16 <sup>h</sup> 51 <sup>m</sup>	82° 8′	10.01	16h51m	82° 8′	0.01 0.01	16 <sup>h</sup> 51 <sup>m</sup>	82° 8′	10.01	16 <sup>h</sup> 51 <sup>m</sup>	82° 8′	10.0
1	57.47	44.13	-ı -6	52.25	41.86	+26	47.77	35.07	+1 +6	45.41	25.37	-1 +6
2	57.30	44.13	0 -8	52.09	41.71	+2 -3	47.66	34.79	0 +7	45.38	25.01	-3 + 3
3	57.12	44.12	+1 -7	51.92	41.55	+2 0	47.55	34.50	-2 +7	45.35	24.66	$-3$ $\circ$
4	56.95	44.11	+2 -5	51.76	41.39	+1 +4	47.44	34.21	-3 + 5	*)45.32	24.30	-3 -3
5	56.77	44.09	+2 -2	51.60	41.22	0 +6	47.33	33.92	-3 +2	45.29	23.95	-2 -6
6	56.59	44.07	+2 +2	51.43	41.05	-I +7	47.22	33.62	-3 -2	45.26	23.59	-I -7
7	56.41	44.04	+1 +5	51.27	40.87	-2 +6	47.11	33.32	-2 -4	45.24	23.23	0 -7
8	56.24	44.01	-ı +6	51.11	40.69	-3 + 3	47.01	33.02	-r -6	45.22	22.87	+1 -6
9	56.06	43.97	-2 +7	50.95	40.51	-3 0	46.91	32.71	o -7	45.21	22.51	+2 -4
10	55.88	43.93	<b>−3</b> +5	50.80	40.32	-3 -3	46.81	32.40	o <del>-7</del>	45.20	22.15	+2 -I
II	55.70	43.88	-3 + 2	50.64	40.13	-2 -5	46.72	32.09	+1 -5	45.19	21.79	+2 +2
12	55.53	43.83	-3 -1	50.49	39.93	-r -7	46.63	31.78	+2 -3	45.18	21.43	+2 +4
13	55.35	43.77	-2 -3	50.34	39.73	0 -7	46.54	31.46	+2 0	45.18	21.07	+1 +6
14	55.18	43.71	-ı -6	50.19	39.52	+1 -6	46.45	31.14	+2 +2	45.18	20.72	o <del>+</del> 7
15	55.00	43.64	—ı —6	50.04	39.31	+2 -4	46.37	30.82	+2 +5	45.19	20.36	-ı +7
16	54.83	43.57	o <b>-7</b>	49.89	39.09	+2 -2	46.29	30.49	+1 +7	45.20	20.00	—ı +5
17	54.65	43.49	+1 -5	49.74	38.87	+2 +1	46.21	30.16	0 ±7	45.21	19.64	-2 + 3
18	54.48	43.40	+2 -4	49.60	38.64	+2 -1-3	46.13	29.83	-1 +6	45.22	19.29	-2 -I
19	54.30	43.31	+2 -1	49.46	38.41	+2 +6	46.06	29.50	-I +5	45.24	18.93	-I -4
20	54.13	43.22	+3 +2	49.32	38.18	+1 +7	45.99	29.17	-2 +2	45.26	18.58	o —6
21	53.96	43.12	24	49.18	37.94	o -⊢8	45.92	28.83	-I -2	45.28	18.22	+-I <b>-</b> -7
22	53.79	43.02	- -I - <del> -</del> 7	49.04	37.70	-1 -1-6	45.86	28.49	-ı - <u>5</u>	45.31	17.87	+2 -6
23	53.61	42.91	- <u>+</u> 1 - <u>+</u> 8	48.91	37.45	—ı ⊣-4	45.80	28.15	○ <del>-7</del>	45.34	17.52	+2 -3
24	53.44	42.80	o +7	48.77	37.20	-r o	45.74	27.81	+1 -7	45-37	17.17	+3 0
25	53.27	42.68	_ı +6	48.64	36.95	-ı -3	45.68	27.46		45.41	16.82	+2 +3
26	53.10	42.56	-2 +2	48.51	36.69	0 -6	45.63	27.12	32	45.45	16.47	i 6
27	52.93	42.43	-I -I	48.38	36.43	- 1 -7	45.58	26.77	+2 +1	45.49	16.12	0 +7
28	52.76	42.29	-1 -5	48.26	36.17	+2 -7	45.53	26.42	- -1 - -4	45.54	15.77	-I +7
29	52.59	42.15	0 -7	48.13	35.90	-i-2 -4	45.49	26.07	○7	45.59	15.42	-2 +5
30	52.42	42.01	+1 -7	48.01	35.63	+2 -I	45.45	25.72	-ı +7	45.64	15.08	-3 +2

		tg δ								
+82° 8′ 10	7.309	+7.240	+82° 8	30"	7.314	+7.245	+82°	8' 40"	7.317	+7.248
20	7.311	+7.243		40	7.317	+7.248		50	7.319	+7.250

47.77 | 35.07 | +1 +6

52.25 41.86 +2 -6 47.89 35.35 +2 +3 45.41 25.37 -1 +6 45.69 14.74 -3 -2

 $\alpha_{1940.0} = 16^{h} 52^{m} 2.49$ 

 $\delta_{1940.0} = +82^{\circ} 8' 20.753$ 

45.75 14.40 -2 -5

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Dez. .

Obere Kulmination Greenwich

Nh)	δ	Ursae	minoris	4 <sup>m</sup> .44
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		Janua	r		Februa	ur		4.44 März			April	
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	17 <sup>h</sup> 51 <sup>m</sup>		0,01 0,01	17 <sup>h</sup> 51 <sup>m</sup>		0,01 0,01	17 <sup>h</sup> 51 <sup>m</sup>		0.01 0.01	17 <sup>h</sup> 51 <sup>m</sup>		0,01 0,01
I	6.77	47.81	∘ −8	10.78	38.19	+4 +2	19.46	32.64	+1 +7	30.71	32.31	$-8 +_3$
2	6.79	47.47	+3 -6	11.01	37.93	+3 +5	19.81	32.53	-2 +8	31.06	32.40	-9 0
3	6.82	47.14	+5 -3	11.25	37.67	0 +7	20.16	32.43	-5 +7	31.41	32.49	-8 -3
4	6.86	46.80	+5 0	11.49	37.42	-3 + <sub>7</sub>	20.51	32.34	<b>−7</b> +5	31.76	32.59	-5 -5
5	6.91	46.46	+4 +4	11.74	37.17	<b>−5</b> +6	20.87	32.25	-8 +2	32.11	32.70	-3 -6
6	6.96	46.12	+2 +6	12.00	36.93	<i>−</i> 7 +4	21.23	32.17	—8 — г	32.45	32.81	∘ −7
7	7.02	45.79	-ı +7	12.26	36.69	-7 +I	21.59	32.09	-6 -3	32.79	32.93	+3 -6
8	7.09	45.46	-3 +7	12.52	36.45	-7 -2	21.95	32.02	<u>-4 -5</u>	33.12	33.06	+6 -4
9	7.16	45.13	-6 + 5	12.79	36.22	-5 <del>-4</del>	22.31	31.96	-ı -6	33.45	33.19	+7 -2
10	7.24	44.80	−7 +3	13.07	36.00	-3 -6	22.68	31.91	+2 -7	33.78	33.33	+8 +1
II	7.33	44-47	-7 0	13.35	35.78	○ -7	23.04	31.86	+5 -6	34.11	33.47	+7 +4
12	7.43	44.14	-6 -3	13.63	35.56	+3 -6	23.40	31.82	+7 -4	34.44	33.62	+6 +6
13	7.53	43.82	-4 -5	13.92	35.35	+6 -5	23.77	31.78	<b>+8</b> −1	34.76	33.77	+3 +7
14	7.64	43.50	-2 -6	14.22	35.15	+8 -3	24.14	31.75	+9 +2	35.08	33.93	0 +7
15	7.76	43.18	+r -7	14.52	34.95	+9 0	24.51	31.73	+7 +5	35.40	34.10	-3 + 5
16	7.88	42.86	+5 -6	14.82	34.75	+9 +3	24.88	31.72	+5 +7	35.71	34.27	-5 +I
17	8.01	42.55	+7 -4	15.13	34.56	+7 +6	25.25	31.71	+2 +7	36.02	34.44	-5 -2
18	8.15	42.24	+9 -2	15.44	34.38	+4 +7	25.62	31.71	-r +6	36.32	34.62	-4 -6
19	8.30	41.93	+9 +2	15.76	34.20	o +7	25.99	31.71	-4 + 3	36.62	34.81	-I -7
20	8.45	41.62	+8 +5	16.08	34.03	-3 + 5	26.35	31.72	-5 0	36.92	35.00	+2 -8
21	8.61	41.32	+5 +7	16.40	33.86	<u>−5</u> +2	26.72	31.73	-5 -4	37.21	35.19	+4 -6
22	8.77	41.02	+2 +7	16.73	33.70	-6 -2	27.09	31.75	-3 -7	37.50	35.38	+6 -3
23	8.94	40.72	<b>−2</b> +6	17.06	33.55	-5 -5	27.46	31.78	∘ −8	37.78	35.58	-1-6 +r
24	9.12	40.42	<b>−</b> 5 +4	17.39	33.40	-3 -7	27.82	31.81	+2 -7	38.06	35.79	+4 +4
25	9.31	40.13	<b>−7</b> °	17.73	33.26	∘ −8	28.19	31.85	+5 -4	38.33	36.00	+1 +7
26	9.50	39.84	-6 -4	18.07	33.12	+3 -6	28.56	31.90	+5 <b>-</b> 1	38.60	36.22	<b>−2</b> +8
27	9.70	39.55	-5 -7	18.41	32.99	+5 -3	28.92	31.95	4	38.87	36.44	-6 + 7
28	9.90	39.27	<b>−</b> 2 <b>−</b> 8	18.76	32.87	+5 +1	29.28	32.01	+2 +6	39.13	36.67	-8 + 5
29	10.11	38.99	+1 -7	19.11	32.75	+3 +4	29.64	32.08	—ı +8	39.38	36.90	-9 +2
30	10.33	38.72	+4 -5	19.46	32.64	+1 +7	30.00	32.15	<b>-4 +7</b>	39.63	37.13	<b>−</b> 8 −1
31	10.55	38.45	+5 -1				30.36	32.23	<b>−7</b> +6	39.88	37-37	<del>-7 -4</del>
32	10.78	38.19	+4 +2				30.71	32.31	-8 + 3			

 $\alpha_{1940.0} = 17^{h} 51^{m} 32.85$   $\delta_{1940.0} = +86^{\circ} 36' 43.10$ 

Obere Kulmination Greenwich

Nh) δ Ursae	minoris	4 <sup>m</sup> 44
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					$\forall h$ ) $\delta$	Ursae mi	noris .	4 <sup>™</sup> 44				
Tag		Mai			Juni			Juli			Augus	t
Lag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		-+-	in		+	in		+	in			in
	17 <sup>b</sup> 51 <sup>m</sup>	86° 36′	0.01 0.01	17 <sup>h</sup> 51 <sup>m</sup>	86° 36′	0.01 0.01	17 <sup>h</sup> 51 <sup>m</sup>	86° 36′	0.01 0.01	17 <sup>b</sup> 51 <sup>m</sup>	86° 37′	10.01
1	39.88	37.37	-7 -4	44.63	46.27	+4 -6	43.31	56.17	-1-7 +4	36.31	4.51	-2 +6
2	40.12	37.61	-4 -6	44.68	46.59	+6 -4	43.17	56.47	6 +-6	36.01	4.73	-5 + 3
3	40.35	37.86	-ı -7	44.73	46.91	+7 -r	43.02	56.77	+3 +7	35.70	4.94	<b>−</b> 6 ∘
4	40.58	38.11	+2 -7	44.77.	47.23	+8 +2	42.87	57.07	—ı +7	35.39	5.15	-6 -4
5	40.80	38.36	+5 -5	44.81	47.55	+6 +4	42.71	57-37	<del>-4</del> +5	35.07	5.36	<b>-4</b> -6
6	41.02	38.62	+7 -3	44.84	47.88	+4 +6	42.54	57.67	-6 +2	34.75	5-57	-ı —8
7	41.23	38.88	±7 °	44.86	48.20	-l-I -l-7	42.37	57.96	-6 -2	34.42	5.77	+2 -7
8	41.44	39.14	+7 +3	44.87	48.52	<b>-2</b> +6	42.19	58.26	-5 -5	34.09	5.97	+4 -5
9	41.64	39.41	+6 +5	44.88	48.84	<u>-4</u> -1-4	42.01	58.55	-3 -7	33.75	6.16	+5 <b>-</b> 1
10	41.84	39.68	+3 +7	44.88	49.17	<b>−6</b> ∘	41.82	58.84	0 -7	33.41	6.35	+5 +2
11	42.03	39.95	o +7	44.88	49.49	<b>−</b> 5 −3	41.62	59.13	+3 -6	33.07	6.54	+3 +5
12	42.21	40.23	-2 +5	44.87	49.82	-4 -6	41.42	59.41	+5 -3	32.73	6.72	0 +7
13	42.39	40.51	-4 + 3	44.85	50.14	-ı - <sub>7</sub>	41.21	59.69	+6 0	32.38	6.90	<b>-3</b> +7
14	42.56	40.80	-5 -1	44.83	50.46	+2 -7	41.00	59.97	+5 +4	32.03	7.07	-6 +6
15	42.73	41.09	-4 -4	44.80	50.78	-1-5 -5	40.78	60.25	+2 +6	31.67	7.24	-8 + 3
16	42.89	41.38	-2 -7	44.76	51.11	+6 -2	40.56	60.52	-ı +7	31.31	7.41	<b>−8</b> ∘
17	43.04	41.67	+ı —8	44.72	51.43	+6 +1	40.33	60.79	-4 ±7	30.95	7.57	-7 -2
18	43.19	41.96	+4 -7	44.67	51.75	+4 +5	40.10	61.06	-6 + 5	30.58	7.73	-5 -5
19	43.33	42.26	+6 -4	44.61   44.55	52.07 52.39	+1 +7 -2 +8	39.86	61.33	-8 - -2	30.21	7.88	-3 -6
20	43.47	42.56	+6 —I	44.48	52.71	-5 + <sub>7</sub>	39.61	61.59	−8 −ı	29.84	8.03	∘ −7
21	43.60	42.86	+5 +3	44.40	53.03	<del>-7</del> +4	39.36	61.85	-6 -3	29.46	8.17	+3 -6
22	43.73	43.16	+3 +6	44.32	53.35	-8 + 1	39.11	62.11	-46	29.08	8.31	±6 <b>−</b> 4
23	43.85	43.46	0 +7	44.23	53.67	-8 -2	38.85	62.37	−ı − <sub>7</sub>	28.70	8.44	+8 -2
24	43.96	43.77	-4 + <sub>7</sub>	44.14	53.98	<b>−</b> 6 −4	38.59	62.62	+2 -7	28.32	8.57	+8 + 1
25	44.07	44.08	<b>-7</b> +6	44.04	54.30	-3 -6	38.32	62.87	+4 -6	27.93	8.70	+8 +4
26	44.17	44.39	$-8 +_{3}$	43.93	54.61	∘ −7	38.04	63.11	+7 -4	27.54	8.82	+6 +6
27	44.26	44.70	<b>−8</b> ∘	43.82	54.92	+3 -6	37.76	63.35	+8 <b>-</b> 1	27.15	8.94	+3 +8
28	44.35	45.01	<b>−</b> 7 <b>−</b> 3	43.70	55.24	+5 -5	37.48	63.59	+8 +2	26.76	9.05	o +7
29	44.43	45.33	-5 -5	43.58	55.55	+7 -2	37.20	63.83	+7 +5	26.36	9.16	-3 + 5
30	44.50	45.64	-2 -7	43.45	55.86	+8 +ı	36.91	64.06	+5 +7	25.96	9.26	-5 +2
31 l	44.57	45.95	+1 -7	43.31	56.17	+7 +4	36.61	64.29	+1 +7	25.56	9.36	-5 -2
32	44.63	46.27	+4 -6				36.31	64.51	<b>-2</b> +6	25.16	9.45	-4 -5
		δ	sec δ	tg 8	δ	sec	δ tg	8	δ	sec δ	tg 8	

 $\alpha_{1940.0} = 17^{h} 51^{m} 32.85$ 

 $\delta_{1940.0} = +86^{\circ} 36' 43.''$ 10

Obere Kulmination Greenwich

т		Septem!	ber	111	Oktob	er			Novem	ber			Dezemb	er	
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Gli	eder	AR.	Dekl.	© Gli	ieder	AR.	Dekl.	C G1	iede
		+	in		+	i			+	i			+	i	n
	17 <sup>h</sup> 51 <sup>m</sup>	86° 37′	0.01 0.01	17 <sup>h</sup> 51 <sup>m</sup>	86° 37′	0.01	10.0	17 <sup>h</sup> 50 <sup>m</sup>	86° 36′	0.01	0.01	17 <sup>h</sup> 50 <sup>m</sup>	86° 36′	0.01	0,0
I	25.16	9.45	-4 -5	12.60	10.02	+3	-7	60.42	65.97	+4	+5	52.12	58.13	-4	+7
2	24.76	9.54	-2 -7	12.18	9.96	+5	-4	60.08	65.77	+1	+7	51.93	57.82	-7	+5
3	24.35	9.63	+1 <b>-</b> 8	11.76	9.90	+-6	-ı	59.74	65.56	-3	-+8	51.75	57.51	-9	+2
4	23.95	9.71	+4 -6	11.34	9.83	+5	+3	59.40	65.34	-6	+7	51.58	57.19	-9	-1
5	23.54	9.78	+5 -3	10.93	9.76	+2	+6	59.06	65.12	9	+4	51.41	56.88	-8	-4
6	23.13	9.85	+5 +1	10.51	9.68	-1	+8	58.73	64.90	-9	+1	51.25	56.56	-5	(
7	22.72	9.92	+3 +4	10.10	9.60	-5	+7	58.41	64.68	-9	-2	51.09	56.24	-2	-7
8	22.31	9.98	+1 +7	9.68	9.51	-7	+5	58.09	64.45	-7	-5	50.94	55.92	+1	-7
9	21.89	10.03	-3 ±7	9.27	9.42	<u>-9</u>	+3	57.77	64.21	-4	6	50.80	55.59	+4	-5
10	21.47	10.08	-6 +6	8.86	9.32	-9	0	57.46	63.97	-1	-7	50.67	55.26	+6	-3
II	21.05	10.13	<b>-</b> 8 +4	8.45	9.22	-8	-3	57.15	63.73	+2	-6	50.54	54.93	+7	C
12	20.64	10.17	-9 +2	8.04	9.12	-5	<b>-5</b>	56.85	63.48	+4	-4	50.42	54.60	+7	+2
13	20.22	10.21	-8 -ı	7.63	9.01	-2	-6	56.55	63.23	+6	2	50.31	54.26	+6	+5
14	19.80	10.24	-6 -4	7.23	8.89	+1	-6	56.26	62.97	+7	+1	50.20	53.93	+3	+7
15	19.38	10.27	-4 -6	6.83	8.77	+3	<b>-</b> 5	55.97	62.71	+6	+3	50.10	53.59	+1	+7
16	18.96	10.29	-ı - <sub>7</sub>	6.43	8.64	+6	-3	55.69	62.45	+5	+5	50.00	53.26	-2	- -(
17	18.53	10.31	+2 -6	6.03	8.51		-1	55.41	62.19	+3	+7	49.91	52.92	-4	+4
18	18.11	10.32	+4 -5	5.64	8.37	+7	+2	55.14	61.92	0	-⊢6	49.83	52.58	-5	C
19	17.69	10.32	+7 -3	5.25	8.23	+7	+4	54.87	61.65	-2	+-5	*)49.76	52.24	-5	-3
20	17.26	10.32	+8 0	4.86	8.08	+5	+6	54.61	61.37	-4	+3	49.69	51.90	-3	-5
21	16.83	10.32	+8 +3	4.47	7.93	+2	÷7	54.35	61.09	-5	-ı	49.63	51.56	0	-7
22	16.41	10.31	+7 +5	4.09	7.77	0	+6	54.10	60.81	-4	-4	49.58	51.21	+3	-7
23	15.98	10.30	+5 +7	3.71	7.61	-3	+4	53.86	60.52	-2	-6	49.54	50.87	+5	-5
24	15.56	10.28	+2 +7	3.33	7.45	<u>-4</u>	+1	53.62	60.23	+1	-7	49.50	50.53	+7	-2
25	15.14	10.26	-ı +6	2.95	7.28	-4	-2	53.39	59-94	+4	<del>-7</del>	49.47	50.19	+7	+2
26	14.71	10.23	-4 +3	2.58	7.11	-3	-5	53.16	59.65	+6	-4	49.45	49.84	+5	+-5
27	14.29	10.20	<b>−</b> 5 ∘	2.21	6.93	0	-7	52.94	59-35	+7	0	49-44	49.50	+2	+7
28	13.87	10.16	-4 -4	1.85	6.75	+3	-7	52.73	59.05	+6	+3	49.43	49.15	-2	+7
29	13.44	10.12	-2 -6	1.49	6.56	+5	-6	52.52	58.75	+3	+-6	49.43	48.81	-5	+6
30	13.02	10.07	○ -8	1.13	6.37	+7	-3	52.32	58.44	0	-+8	49-44	48.46	-8	+4
31	12.60	10.02	+3 -7	0.77	6.17	+6	+1	52.12	58.13	-4	+7	49.45	48.12	-9	
32				0.42	5.97	+4	+5					49-47	47.78	8	-3

 $<sup>\</sup>alpha_{1940.0} = 17^h 51^m 32.85$ 

 $<sup>\</sup>delta_{1940.0} = +86^{\circ} 36' 43.''$ 10

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Dez. 19.

Obere Kulmination Greenwich

Ni)	λ	Ursae	minoris	6 <sup>m</sup> .55
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m	-	Janua	r		Februa	ır		März		April		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	18 <sup>h</sup> 32 <sup>m</sup>	89° 2′	0.01 0.01	18 <sup>h</sup> 32 <sup>m</sup>	89° 2′	0.01 0.01	18h33m	89° 2′	0.01 0.01	18 <sup>h</sup> 33 <sup>m</sup>	89° 2′	0.01 0.01
Ι	41.07	48.23	- 7 -7	47.52	38.32	+19 +2	13.31	31.59	+ 8 +6	51.84	29.48	<b>-</b> 3○ +5
2	40.89	47.90	+ 6 −7	48.13	38.03	+14 +5	14.45	31.43	- 3 +8	53.12	29.51	-33 +2
3	40.73	47.57	+16 -4	48.76	37.74	+ 5 +7	15.60	31.28	-15 +8	54.39	29.55	-31 -1
4	40.60	47.24	+2I I	49.42	37.46	- 6 +8	16.76	31.13	<b>-24</b> +6	55.66	29.59	-24 -4
5	40.50	46.91	+20 +3	50.10	37.18	-16 + <sub>7</sub>	17.93	30.99	<b>−</b> 3○ +4	56.93	29.64	-r <sub>5</sub> -6
6	40.42	46.58	+13 +6	50.80	36.90	-24 +5	19.11	30.85	-30 +1	58.19	29.69	<b>− 3 −7</b>
7	40.37	46.25	+ 3 +7	51.52	36.63	-28 + 2	20.30	30.72	-27 -2	59.44	29.75	+8 -7
8	40.34	45.92	<b>-</b> 8 ⊣-8	52.26	36.36	-27 0	21.50	30.60	-19 -5	60.69	29.82	+19 -5
9	40.34	45.59	-18 +6	53.03	36.10	-23 -3	22.71	30.48	-10 -6	61.93	29.89	+27 -3
OI	40.37	45.26	-25 +4	53.81	35.84	-15 -5	23.92	30.37	+ 2 -7	63.17	29.97	+32 0
11	40.43	44.93	-28 + 1	54.62	35.58	- 4 -7	25.14	30.26	+14 -6	64.40	30.06	+32 +2
12	40.51	44.60	-26 -2	55.44	35.33	+ 8 -7	26.37	30.16	+24 -5	65.63	30.15	+27 +5
13	40.62	44.27	-20 -4	56.29	35.08	+20 -6	27.61	30.07	+32 -2	66.84	30.25	+17 +6
14	40.75	43.94	-II -6	57.15	34.84	+30 -4	28.85	29.98	+35 0	68.05	30.35	+ 4 +6
15	40.91	43.61	+ 1 -7	58.03	34.60	+36 <b>-</b> 1	30.10	29.90	+33 +3	69.25	30.46	- 8 + <sub>5</sub>
16	41.10	43.28	+13 -7	58.94	34.36	+36 +2	31.36	29.83	+25 +6	70.44	30.57	-17 +2
17	41.31	42.96	+25 -6	59.86	34.13	+31 +4	32.62	29.76	+13 +7	71.61	30.69	-21 -1
18	41.55	42.64	+33 -3	60.79	33.90	+20 +6	33.89	29.70	0 +6	72.78	30.82	<b>−</b> 18 <b>−</b> 5
19	41.81	42.32	+37 0	61.75	33.68	+ 6 +7	35.16	29.64	-13 +4	73.94	30.95	-10 <b>-</b> 7
20	42.10	42.00	+34 +3	62.72	33.46	<b>-</b> 8 +6	36.44	29.59	-21 +1	75.09	31.08	+ 2 -8
21	42.42	41.68	+25 +6	63.71	33-25	-19 +3	37.72	29.55	-22 -3	76.23	31.22	+13 -7
22	42.76	41.37	+12 +7	64.72	33.04	-25 -I	39.00	29.51	<b>−</b> 17 −6	77.35	31.37	+21 -4
23	43.13	41.05	- 3 +7	65.74	32.84	-24 -4	40.28	29.48	<b>−</b> 7 <b>−</b> 8	78.47	31.52	+23 0
24	43.52	40.74	-17 +4	66.78	32.65	-16 -7	41.56	29.45	+ 5 -7	79.57	31.68	+18 +4
25	43.93	40.43	<b>−26</b> +1	67.83	32.46	- 5 -8	42.85	29.43	+15 -5	80.66	31.84	+ 9 +7
26	44.37	40.12	-28 -3	68.90	32.27	+7-7	44.14	29.42	+20 -2	81.74	32.01	- 4 +8
27	44.84	39.82	-23 -6	69.98	32.09	+16 -4	45.42	29.41	+20 +2	82.80	32.18	-17 +8
28	45.33	39.51	-13 -7	71.08	31.92	+19 0	46.71	29.41	+12 +5	83.85	32.36	-27 +6
29	45.84	39.21	o —7	72.19	31.75	+16 +4	47.99	29.42	+ 1 +8	84.88	32.54	-33 +3
30	46.38	38.91	+11 -5	73.31	31.59	+ 8 +6	49.28	29.43	-11 +8	85.90	32.73	-33 o
31	46.94	38.61	+18 -2				50.56	29.45	-23 +7	86.91	32.92	-29 -3
32	47.52	38.32	+19 +2				51.84	29.48	-3º +5			

 $|\sec\delta|$  tg  $\delta$   $|\sec\delta|$  tg  $\delta$   $|\sec\delta|$  tg  $\delta$ +89° 2' 20'' 59.617 +59.608 +89° 2' 30'' 59.790 +59.781 +89° 2' 40'' 59.964 +59.955 30 59.790 +59.781 40 59.964 +59.955 50 60.138 +60.130

 $\alpha_{1940,0} = 18^h \ 34^m \ 9^s_{77}$   $\delta_{1940,0} = +89^\circ \ 2' \ 39.''26$ 

#### Obere Kulmination Greenwich

				1	<i>∀i)</i> λ	Ursae mi	noris	6 <sup>m</sup> .55				
Tag		Mai			Juni			Juli			Augus	t
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	18h34m	89° 2′	0.01 0.01	18h34m	89° 2′	10.0 10.0	18h34m	89° 2′	10.01	18h33m	89° 2′	0.01 0.01
I	26.91	32.92	-29 -3	49.24	40.79	-1-11 —6	51.00	50.62	+31 +2	91.99	59.87	- 3 +6
2	27.90	33.12	-20 -5	49.63	41.09	+21 -5	50.79	50.94	+26 +5	91.06	60.13	-15 +4
3	28.87	33.32	- 9 <del>-</del> 7	50.01	41.39	+28 -2	50.47	51.26	+16 +7	90.12	60.39	-23 +1
4	29.83	33.52	+ 3 -7	50.36	41.69	+31 0	50.12	51.58	+ 2 +7	89.15	60.65	-25 -3
5	30.77	33.73	+15 -6	50.69	42.00	+28 +3	49.76	51.89	—rr +-6	88.17	60.91	<b>−2</b> 0 <b>−6</b>
6	31.70	33-95	+24 -4	51.00	42.31	+21 +6	49.37	52.21	-20 +3	87.17	61.16	<u>-10</u> -7
7	32.61	34.17	+30 -1	51.29	42.62	+10 +7	48.96	52.53	-25 -1	86.15	61.41	+ 2 -7
8	33.50	34.39	+30 +1	51.55	42.93	-3 +6	48.53	52.84	-23 -4	85.12	61.66	+13 -5
9	34.38	34.62	+26 +4	51.79	43.24	-14 +4	48.07	53.15	-16 -6	84.07	61.90	
10	35-24	34.85	+18 +6	52.01	43.56	-22 +I	47.60	53-47	- 4 - <sub>7</sub>	83.01	62.14	+20 +1
II	36.08	35.08	+7+7	52.20	43.87	-23 -2	47.10	53.78	+8-7	81.93	62.37	+15 +5
12	36.90	35.32	<b>- 5</b> +6	52.38	44.19	-19 -5	46.58	54.09	+18 -4	80.84	62.60	+ 5 +7
13	37.70	35.56	-15 +4	52.53	44.51	- 9 <del>-</del> 7	46.04	54.40	+23 -1	79.73	62.83	<b>-</b> 7 +-8
14	38.49	35.81	<b>−21</b> 0	52.66	44.83	+ 47	45.48	54.70	+21 +3	78.60	63.06	-19 +7
15	39.26	36.06	-20 -3	52.76	45.15	+15 -6	44.89	55.01	+-14 +-6	77.46	63.28	-27 + 5
16	40.01	36.31	-13 -6	52.85	45.47	+23 -3	44.29	55.31	+ 2 +7	76.30	63.50	-30 +2
17	40.73	36.57	- 3 -8	52.91	45.79	+24 +1	43.67	55.61	-IO +7	75.13	63.72	-29 -I
18	41.44	36.83	+ 9 -7	52.95	46.11	+20 +4	43.03	55.91	-21 +6	73.95	63.93	-23 -4
19	42.13	37.10	+19 -5	52.96	46.43	+10 +6	42.37	56.20	-28 +4	72.75	64.14	-15 -6
20	42.80	37.37	+25 -2	52.96	46.75	<b>- 2</b> +8	41.68	56.50	-3° +1	71.54	64.34	- 4 - <sub>7</sub>
21	43.45	37.64	+23 +2	52.93	47.08	-15 +7	40.98	56.79	-28 -2	70.32	64.54	+ 8 -6
22	44.08	37.92	+16 +5	52.87	47.40	-25 +5	40.26	57.08	-21 -5	69.08	64.74	+19 -5
23	44.69	38.19	+ 4 +7	52.80	47.72	-31 + 3	39.52	57.37	<b>-11</b> -6	67.83	64.93	+28 -3
24	45.28	38.47	- 9 +8	52.70	48.04	<b>−31</b> 0	38.76	57.66	+ 1 -7	66.56	65.12	+33 -1
25	45.85	38.75	-23 +7	52.58	48.36	-26 -3	37.98	57.94	+13 -6	65.29	65.30	+33 +2
26	46.40	39.04	<b>-</b> 3○ +5	52.43	48.69	<b>−18 −5</b>	37.18	58.23	+24 -5	64.00	65.48	+28 +5
27	46.92	39.32	-33 + 1	52.27	49.01	<b>−</b> 6 <b>−</b> 7	36.36	58.51	+31 -2	62.70	65.66	+18 +7
28	47.43	39.61	<b>−31 −2</b>	52.08	49.33	+ 6 -7	35.52	58.79	+34 +1	61.39	65.83	+ 5 +7
29	47.91	39.90	-24 -4	51.87	49.65	+18 -6	34.67	59.06	+31 +4	60.06	66.00	-8 + 5
30	48.37	40.19	<b>−14 −6</b>	151.63	49·97 50.30	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	33.79	59.33	+23 +6	58.73	66.17	<del>-</del> 18 +3
31	48.82	40.49	<b>-</b> 2 −7	51.09	50.62	+31 +2	32.90	59.60	+10 +7	57.39	66.33	-23 -I
32	49.24	40.79	+11 -6				31.99	59.87	- 3 +6	56.04	66.48	-21 -4
		δ	sec δ	tg 8	δ	sec	δ   tg	8	8	sec δ	tgδ	

 $\alpha_{1940.0} = 18^{h} 34^{m} 9.77$ 

 $\delta_{1940.0} = +89^{\circ} 2' 39''26$ 

#### Obere Kulmination Greenwich

Ni)	λ	Ursae	minoris	6 <sup>m</sup> 55
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Tag	AR.				Oktobe	31	1	Novemb	er		Dezemb	er
	AIL.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	18 <sup>h</sup> 33 <sup>m</sup>	89° 3′	0.01 0.01	18 <sup>h</sup> 32 <sup>m</sup>	89° 3′	0.01 0.01	18 <sup>h</sup> 31 <sup>m</sup>	89° 3′	0.01 0.01	18 <sup>h</sup> 31 <sup>m</sup>	89° 2′	0,01 0,01
r	56.04	6.48	-21 -4	72.01	9.07	+ 7 -7	86.00	7.13	+20 +4	50.75	60.90	-11 +8
2	54.67	6.63	-r3 -7	70.48	9.08	+17 -5	84.62	6.99	+ 8 +7	49.85	60.63	-24 +7
3	53-30	6.78	- 2 -8	68.96	9.09	+22 -2	83.26	6.84	- 5 +8	48.96	60.36	-33 +4
4	51.91	6.92	+10 -7	67.43	9.09	+21 +2	81.90	6.69	<b>−19</b> +8	48.10	60.08	-36 + 1
5	50.52	7.06	+18 -4	65.90	9.09	+13 +5	80.55	6.53	<b>−3</b> 0 +6	47.26	59.80	-33 -2
6	49.12	7.19	+21 0	64.37	9.09	+ 1 +8	79.22	6.37	-36 +2	46.44	59.52	-25 -5
7	47.70	7.32	+17 +4	62.84	9.08	-13 +8	77.90	6.20	-35 -I	45.64	59.23	-13 -6
8	46.28	7.45	+ 7 +6	61.32	9.06	-25 +7	76.59	6.03	-29 -4	44.86	58.94	- I -7
9	44.86	7.57	- 5 +8	59.79	9.04	<u>−33</u> +4	75.29	5.86	-20 -6	44.11	58.65	+11 -6
10	43.42	7.69	-17 +7	58.27	9.01	-35 +I	74.01	5.68	- 8 -6	43.38	58.35	+20 -4
II	41.98	7.80	-27 +6	56.75	8.97	-32 -2	72.74	5.49	+ 4 -6	42.67	58.06	+26 -r
12	40.53	7.91	-32 + 3	55.23	8.93	-24 -4	71.49	5.30	+15 -5	41.99	57.76	+28 +1
13	39.07	8.01	<b>−32</b> 0	53.72	8.89	- <b>14</b> -6	70.25	5.11	+23 -3	41.33	57.45	+25 +4
14	37.61	8.11	-27 -3	52.21	8.84	- 2 -6	69.02	4.91	+27 <b>-</b> I	40.69	57.15	+18 +6
15	36.14	8.21	-19 -5	50.70	8.79	+ 9 -6	67.81	4.71	+27 +2	40.08	56.84	+ 8 +7
16	34.66	8.30	- 8 -6	49.19	8.73	+19 -4	66.61	4.50	+24 +4	39.49	56.53	- 3 +6
17	33.18	8.38	+ 3 -6	47.69	8.67	+26 -2	65.43	4.29	+16 +6	38.93	56.22	-13 <del>+</del> 4
18	31.69	8.46	+r4 -6	46.20	8.60	+30 0	64.27	4.07	+ 6 +6	38.39	55.91	-20 +I
19	30.20	8.54	+24 -4	44.71	8.53	+29 +3	63.12	3.85	- 5 +6	37.87	55.59	-21 -2
20	28.70	8.61	+30 -1	43.23	8.45	+24 +5	61.99	3.63	-14 +3	37.38	55.27	-16 -5
21	27.20	8.68	+32 +1	41.75	8.37	+15 +7	60.87	3.40	-19 0	36.91	54.95	- 6 <del>-</del> 7
22	25.69	8.74	+30 +4	40.28	8.28	+ 3 +6	59.78	3.17	-17 -3	36.47	54.63	+ 6 -7
23	24.18	8.80	+22 +6	38.82	8.19	- 7 +5	58.70	2.93	-11 -6	36.05	54.31	+18 -6
24	22.67	8.85	+12 +7	37.36	8.09	-I5 +2	57.64	2.69	○ -8	35.66	53.98	+25 -3
25	21.15	8.90	- I +6	35.91	7.99	-19 -I	56.60	2.45	+12 -7	35.29	53.65	+27 0
26	19.63	8.94	-12 +4	34.47	7.88	-15 -5	55.57	2.20	+22 -5	34.95	53.33	+22 +4
27	18.11	8.98	-19 0	33.03	7.77	-7-7	54.57	1.95	+27 -2	34.64	53.00	+rr +7
28	16.59	9.01	-20 -3	31.61	7.65	+ 5 -8	53.58	1.69	+25 +2	34.35	52.66	<b>−</b> 3 +8
29	15.07	9.04	-14 -6	30.19	7.53	+16 -7	52.62	1.43	+17 +5	*)34.09	52.33	-16 +7
30	13.54	9.06	- 4 -8	28.78	7.40	+24 -4	51.68	1.17	+ 4 +8	33.86	52.00	-27 +5
31	12.01	9.07	+ 7 -7	27.38	7.27	+25 0	50.75	0.90	-11 +8	33.65	51.67	-33 + 2
32				26.00	7.13	+20 +4				33.47	51.33	-33 -I

 $\alpha_{1940.0} = 18^{h} 34^{m} 9.77$ 

 $\delta_{1940.0} = +89^{\circ} 2' 39.726$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Dez. 29.

Obere Kulmination Greenwich Whi = 6 Drannin = m6-

					Nk)	76 D	raco	nis 5'	69				
Tag		Janua	ır		Februa	r			März			April	
145	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glied	der	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
			in		+-	in			+	in		+	in
	20 <sup>h</sup> 46 <sup>m</sup>	82° 18′	0.01 0.01	20 <sup>h</sup> 46 <sup>m</sup>	82° 18′	0.01	0.01	20 <sup>h</sup> 46 <sup>m</sup>	82° 18′	0.01 0.01	20 <sup>h</sup> 46 <sup>m</sup>	82° 18′	10.01 0.01
I	56.73	58.31	-3 -6	54.96	48.80	+2 -	-ı	55.99	39.48	+2 +5	59.58	32.46	-ı +8
2	56.63	58.05	-ı -6	*)54.95	48.46	+2 -	+2	56.07	39.19	+2 +7	59.73	32.32	-2 +6
3	56.53	57.79	○ −6	54.95	48.13	+2 -	+5	56.15	38.90	+1 +9	59.88	32.18	-2 +3
4	56.44	57.52	+1 -3	54.95	47.80	+2 -	+8	56.24	38.61	0 +9	60.03	32.05	-3 0
5	56.35	57.24	+2 0	54.95	47.47	+1 -	+-8	56.33	38.33	-ı +7	60.18	31.92	-3 -3
6	56.26	56.96	+3 +3	54.95	47.14	0 -	+8	56.42	38.05	-2 + <sub>4</sub>	60.33	31.80	-2 -5
7	56.17	56.68	+2 +6	54.96	46.80	—r -	+6	56.51	37.78	<b>−3</b> +2	60.48	31.69	-I -7
8	56.09	56.39	+1 +8	54.97	46.47	-2	+3	56.61	37.51	-3 -ı	60.64	31.58	∘ −7
9	56.01	56.10	+1 +8	54.99	46.14	-2	0	56.71	37.24	-2 -4	60.79	31.48	+1 -6
10	55.93	55.81	-I +7	55.01	45.80	-3 -	-3	56.81	36.98	-2 -6	60.95	31.39	+2 -5
II	55.85	55.51	-r +5	55.03	45.47	-2 -	-5	56.92	36.72	-r -7	61.10	31.30	+3 -2
12	55.78	55.21	-2 +2	55.05	45.14	—I -	-7	57.03	36.47	∘ −8	61.26	31.21	+3 +1
13	55.71	54.91	-3 -1	55.08	44.81	0 -	-8	57.14	36.22	+2 -6	61.42	31.13	+3 +3
14	55.64	54.61	-3 -4	55.11	44.48	+ı -	-8	57.25	35.98	+2 -4	61.58	31.06	+2 +5
15	55.58	54.31	<b>-2 -6</b>	55.14	44.15	+2 -	-6	57.36	35.74	+3 -2	61.74	31.00	+1 +5
16	55.52	54.00	-ı -8	55.18	43.82	+3 -	-	57-47	35.51	+3 +1	61.90	30.94	-ı +4
17	55.46	53.69	∘ −8	55.22	43.50	+3	0	57.59	35.28	+3 +4	62.06	30.89	-2 +2
18	55.41	53.37	+1 -7	55.26	43.18		+3	57.72	35.05	+2 +5	62.22	30.84	-3 -2
19	55.36	53.06	+2 -5	55.31	42.86	+2 -		57.84	34.83	0 +5	62.39	30.80	-3 -5
20	55.31	52.74	+3 -2	55-35	42.54	+1 -	+6	57.96	34.62	-1 +3	62.55	30.77	-2 -7
21	55.26	52.42	+3 +2	55.40	42.22	—ı -	+5	58.09	34.41	-2 0	62.71	30.74	-ı - <sub>7</sub>
22	55.22	52.10	+3 +4	55.45	41.90	-2 -	+3	58.22	34.20	-3 -3	62.88	30.72	∘ −6
23	55.18	51.78	+2 +6	55.51	41.59	-3 -	-I	58.34	34.00	-3 -6	63.04	30.70	+2 -3
24	55.14	51.45	0 +6	55.57	41.28	-3 -	-4	58.47	33.81	-2 -7	63.20	30.69	+2 +1
25	55.11	51.12	-r +4	55.63	40.97	-2 -	-6	58.61	33.62	∘ −6	63.37	30.69	+-2 +-5
26	55.08	50.79	-3 +2	55.70	40.67	-ı -	-6	58.74	33-44	+r −4	63.53	30.69	+28
27	55.05	50.46	-3 -2	55.77	40.37	0 -	-5	58.88	33.26	+2 <b>-1</b>	63.70	30.70	+1 +9
28	55.03	50.13	-3 -5	55.84	40.07	+1 -	-2	59.02	33.09	+2 +3	63.86	30.72	o +9
29	55.01	49.80	-2 -6	55.92	39.77	+2 -	+1	59.16	32.92	+2 +6	64.02	30.75	-1 +7
30	54.99	49.46	-r -6	55.99	39.48	+2 -	+5	59.30	32.76	-+1 -+9	64.19	30.78	-2 +4
31	54.97	49.13	+1 -4					59.44	32.61	o +9	64.35	30.81	-3 + 1
32	54.96	48.80	+2 -1					59.58	32.46	<b>−</b> 1 +8			
		δ	sec 8	tg δ	8		sec	δ   tg	8	8	sec δ	tg δ	
	+82°	18' 30"	7.471		+82° 18′	40"	7.47			2° 18′ 50′′	7-477	+7.410	>
		40		+7.407		50	7.47			60	7.480	+7.412	
						1	,		,				

 $\alpha_{1940.0} = 20^{h} 47^{m} 3.07$   $\delta_{1940.0} = +82^{\circ} 18' 38''.84$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Febr. 2.

Obere Kulmination Greenwich

					Nk)	76 Drace	omis 5	<sup>m</sup> 69				
Tag		Mai			Juni			Juli			Augus	t
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+-	in		+	in			in		1 +	in
	20 <sup>h</sup> 47 <sup>m</sup>	82° 18′	10,0	20 <sup>h</sup> 47 <sup>m</sup>	82° 18′	0.01 0.01	20 <sup>h</sup> 47 <sup>m</sup>	82° 18′	0.01 0.01	20 <sup>h</sup> 47 <sup>m</sup>	82° 18′	0.01 0.01
ī	4.35	30.81	-3 + 1	9.04	34.79	-r -7	8 12.IO	42.95	+2 -5	12.94	53.66	+3 +5
2	4.51	30.85	-3 -2	9.17	35.00	∘ −7	12.17	43.27	+3 -2	12.93	54.02	+2 +6
3	4.68	30.90	-2 -4	9.30	35.22	+r -6	12.23	43.59	+3 +1	12.91	54.38 54.73	0 +61 -1 +4
4	4.84	30.95	-2 -6	9.43	35.44	+2 -4	12.29	43.91	+3 +4	12.87	55.09	-3 +1
5	5.01	31.01	-1 -7	9.56	35.67	+3 <b>-</b> 1	12.35	44.24	+2 +6	12.84	55.45	<b>−3 −2</b>
6	5.17	31.08	o -7	9.68	35.90	+3 +2	12.41	44.58	+1 +6	12.81	55.80	-3 -5
7	5.33	31.15	+2 -5	9.80	36.14	+3 +4	12.46	44.91	-r +5	12.78	56.16	-2 -6
8	5.49	31.23	+3 -3	9.92	36.38	+1 +6	12.51	45.24	-2 +3	12.75	56.52	∘ −6
9	5.65	31.31	+3 0	10.04	36.63	0 +6	12.56	45.58	<b>−</b> 3 ∘	12.71	56.87	+1 -4
10	5.81	31.40	+3 +3	10.15	36.88	-ı +4	12.60	45.92	-3 -3	12.67	57.23	+2 -1
11	5.96	31.50	+2 +5	10.27	37.13	-2 +2	12.64	46.25	<b>-2 -6</b>	12.63	57.58	+2 +2
12	6.12	31.60	+1 +6	10.38	37.39	-3 -2	12.68	46.59	_ı _ <sub>7</sub>	12.59	57.93	+2 +5
13	6.28	31.71	0 +5	10.49	37.65	-3 -5	12.72	46.94	∘ −6	12.54	58.28	+2 +8
14	6.43	31.82	-ı +3	10.60	37.91	-2 -7	12.76	47.29	+r -3	12.49	58.63	+1 +8
15	6.58	31.94	<b>−2</b> 0	10.71	38.18	-ı - <sub>7</sub>	12.79	47.63	+2 0	12.44	58.98	-r +7
16	6.74	32.06	-3 -3	10.81	38.45	+r -6	12.82	47.98	+3 +3	12.38	59-33	-ı +6
17	6.89	32.19	-2 -6	10.91	38.73	+2 -3	12.85	48.33	+2 +6	12.33	59.68	<b>-2</b> +3
18	7.04	32.33	-I -7	11.01	39.01	+3 +1	12.88	48.68	+1 +8	12.27	60.02	<b>−3</b> ∘
19	7.19	32.47	0 -7	11.11	39.29	+3 +4	12.90	49.03	○ +8	12.21	60.36	-3 -3
20	7.34	32.62	+1 -5	11.20	39.58	+2 +7	12.92	49-39	-r +7	12.14	60.71	-2 -5
21	7.49	32.77	+2 -1	11.30	39.87	+1 +8	12.94	49.74	-2 +5	12.07	61.05	-r <b>-</b> 7
22	7.64	32.93	+3 +3	11.39	40.16	0 +8	12.95	50.09	-3 +2	12.00	61.39	∘ −7
23	7.78	33.09	+2 +6	11.48	40.46	-ı +6	12.96	50.45	-3 -I	11.93	61.73	+r -7
24	7.93	33.26	+2 +8	11.57	40.76	-2 +4	12.97	50.81	-3 -4	11.86	62.06	+2 -5
25	8.08	33.43	0 +9	11.65	41.06	-3 +I	12.98	51.16	<b>-2 -6</b>	11.78	62.40	+3 -3
26	8.22	33.61	-ı +8	11.73	41.37	-3 -2	12.98	51.52	-t -7	11.70	62.73	+3 0
27	8.36	33.79	<b>−2</b> +6	11.81	41.68	-2 -5	12.98	51.87	○ -7	11.62	63.06	+3 +3
28	8.50	33.98	-3 + 3	11.89	41.99	-r -7	12.98	52.23	+2 -6	11.54	63.39	+2 +5
29	8.64	34.18	-3 -I	11.96	42.31	∘ −7	12.97	52.59	+2 -4	11.45	63.71	+1 +6
30	8.78	34.38	-3 -3	12.03	42.63	+1 -7	12.96	52.95	+3 -1	11.36	64.04	—ı +5
31	8.91	34.58	<b>-2</b> -6	12.10	42.95	+2 -5	12.95	53.30	+3 +2	11.27	64.36	-2 +2
32	9.04	34.79	-ı - <sub>7</sub>				12.94	53.66	+3 +5	11.18	64.68	-3 -I

 $\alpha_{1940.0} = 20h 47^m 3.507$ 

 $\delta_{1949.0} = +82^{\circ} 18' 38.''84$ 

Obere Kulmination Greenwich

						Nk)	76 Dra	aconis 5	; <del>"</del> 69					
Tag		Septem	ber			Oktob	er		Novem	ber		Dezemb	er	
1.46	AR.	Dekl.	C G1	ieder	AR.	Dekl.	© Gliede	r AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	
		-+-	i.			+	in		+	in		-+-	in	
	20h47h	82° 19′	0.01	0,01	20 <sup>h</sup> 47 <sup>m</sup>	82° 19′	0.01 0.0	20h46m	82° 19′	10.01 0.01	20h46m	82° 19′	0,01 0,01	
I	11.18	4.68	-3	_r	7.47	12.85	-2 -	62.36	17.32	+3 +1	57.25	16.62	+1 +8	
2	11.08	5.00	-3	-4	7.32	13.07	0 -		17.38	+2 +5	57.09	16.51	o +9	
3	10.98	5.31	-2	-6	7.17	13.28	+1 -	62.01	17.43	+2 +8	56.94	16.39	-1 +8	
4	10.88	5.62	-1	-7	7.02	13.48	+2 -	61.83	17.48	+1 +9	56.78	16.26	-2 +5	
5	10.78	5.93	0	-5	6.86	13.68	+2 +5	61.66	17.53	-ı +9	56.63	16.13	<b>-3</b> +2	
6	10.68	6.24	+1	-3	6.71	13.88	+2 +7	61.48	17.57	-2 + <sub>7</sub>	56.47	15.99	-3 -ı	
7	10.58	6.55	+2	+1	6.56	14.08	+1 +9	61.31	17.60	<b>−3</b> +4	56.32	15.85	-3 -4	
8	10.47	6.85	+2	+5	6.40	14.27	0 +	61.13	17.62	-3 + 1	56.17	15.70	-2 -6	
9	10.36	7.15	+2	+7	6.24	14.45	-ı +8	60.96	17.64	-3 -2	56.02	15.55	— <b>г</b> —6	
10	10.25	7.44	+1	+9	6.08	14.63	-2 +6	60.79	17.66	-2 -4	55.87	15.39	o —6	
II	10.14	7.73	0	+9	5.92	14.81	-3 +3	60.61	17.67	-ı -6	55.72	15.23	+1 -5	
12	10.02	8.02	<b>—</b> I	+7	5.76	14.98	<u>−3</u> −:	60.44	17.67	∘ −6	55.58	15.06	+2 -3	
13	9.90	8.31	-2	+4	5.60	15.14	-3 -3		17.67	+I -6	55.44	14.88	+3 0	
14	9.78	8.59	-3	+1	5.43	15.30	-2 -	60.09	17.66	+2 -4	55.30	14.70	+3 +3	
15	9.66	8.87	-3	-2	5.27	15.46	-ı -e	59.92	17.65	+3 -2	55.16	14.52	+2 +5	
16	9.53	9.15	-2	-4	5.10	15.61	0 -6	59.75	17.63	+3 +1	55.03	14.33	+1 +6	
17	9.41	9.42	-2	<del>-6</del>	4.94	15.75	+1 -5	0, 0,	17.60	+3 +3	54.89	14.13	0 +5	
18	9.28	9.69	0	-7	4.77	15.89	+2 -2	59.40	17.57	+2 +5	54.76	13.93	-1 +4	
19	9.15	9.95		一7	4.60	16.03	+3 -1	1000	17.53	+1 +5	54.63	13.73	<b>−2</b> +1	
20	9.02	10.21	+2	<b>-</b> 5	4.43	16.16	+3 +1	59.06	17.49	o +5	54.50	13.52	-2 -2	
21	8.89	10.47	+3	-3	4.26	16.28	+3 +4	58.89	17.44	-I +2	54-37	13.30	-2 <b>-</b> 5	
22	8.76	10.72	+3	- <b>1</b>	4.09	16.40	+2 +5	58.72	17.38	<b>−2</b> 0	54.25	13.08	<b>−2 −7</b>	
23	8.62	10.97	_	+2	3.92	16.52	+1 +5		17.32	<b>-2</b> -4	54.13	12.85	∘ −7	
24	8.48	11.22	_	+5	3.75	16.63	<b>−1</b> +4		17.25	<b>−2 −7</b>	54.01	12.62	+ı <b>-</b> 6	
25	8.34	11.46	+-2	+6	3.57	16.73	-2 +1	58.22	17.18	-ı —8	53.89	12.39	+2 -3	
26	8.20	11.70	0	+-5	3.40	16.83	-2 -2	0	17.10	∘ −7	53.78	12.15	+3 0	
27	8.06	11.94	<b>—</b> 1	_	3.23	16.93	-3 - 5		17.02	+r <b>-</b> 5	53.66	11.91	+3 +4	
28	7.92	12.17	-2	0	3.05	17.02	-2 -7	10,10	16.93	+2 -I	53.55	11.66	+2 +7	
29	7.77	12.40	-3	-	2.88	17.10	-ı -8	10.0.	16.83	+3 +3	53.44	11.41	+1 +9	
30	7.62	12.63	-2	-6	2.71	17.18	+1 -6	57.41	16.73	+2 +6	53.33	11.15	ı +8	
31	7-47	12.85	-2	<b>-7</b>	2.53	17.25	+2 -3		16.62	+ı +-8	53.23	10.89	-2 +6	
32					2.36	17.32	+3 +1				53.13	10.62	-3 + 3	

sec δ tg δ δ sec δ tg δ +82° 19′ 0′′ 7.480 +7.412 +82° 19′ 10′′ 7.482 +7.415 10 7.482 +7.415 20 7.485 +7.418

 $\alpha_{1940,0} = 20^{h} 47^{m} 3.57$   $\delta_{1940,0} = +82^{*} 18' 38.84$ 

Obere Kulmination Greenwich

Sa) 4 G. Octantis 5".
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Tag	AR.	Janua Dekl.	© Glieder		Februa	PT		März			April	
12.5	-	Dekl.	C Gueder		D. L1	@ O!! - 1	- 172	T) - 1-1	@ 02:-1			
170	h			AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
DAY			in	h m	-	in 8 , ,,	h m		in s "	h m		in s "
	1 <sup>h</sup> 40 <sup>m</sup>	85° 4′	0.01 0.01	1 40 m	85° 4′	0.01 0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 4′	0.01 0.01	Ih 40m	85° 4′	0.01 0.01
1	37.28	45.00	+5 +3	29.14	42.99	-2 - 5	22.70	36.36	<b>−5 −3</b>	18.49	25.99	-3 + 7
2	37.02	45.03	+4 -1	28.89	42.83	<u>-4</u> - 5	22.51	36.07	-6 0	18.41	25.63	-ı +8
3	36.75	45.05	+2 -4	28.64	42.67	-5 - 3	22.33	35.77	-6 +2	18.33	25.26	+r +8
4	36.49	45.07	0 -5	28.39	42.50	<b>−</b> 6 o	22.15	35-47	<b>-4</b> +5	18.26	24.89	+3 +7
5	36.22	45.08	<b>-2</b> -6	28.15	42.32	-5 + 3	21.97	35.17	-2 +7	18.19	24.52	+4 +5
6	35.96	45.08	-4 -4	27.90	42.14	-4 + 5	21.80	34.86	o +8	18.12	24.15	+5 +2
7	35.69	45.07	-6 -2	27.66	41.96	-2 + 7	21.63	34.55	+2 +7	18.06	23.78	+5 -1
8	35.42	45.06	-6 +I	27.42	41.76	+1 +7	21.46	34.23	+3 +6	18.01	23.40	+4 -4
9	35.16	45.05	-5 ±4	27.18	41.57	+2 + 6	21.30	33.92	+5 +3	17.95	23.03	+2 -7
10	34.89	45.03	-3 +6	26.95	41.37	+4 + 5	21.14	33.60	+5 0	17.91	22.66	0 -8
II	34.62	45.00	-ı +7	26.71	41.16	+5 + 2	20.98	33.28	+5 -3	17.86	22.29	-2 -9
12	34.36	44.97	+1 +7	26.48	40.95	+5 - 1	20.83	32.96	+3 -6	17.82	21.91	<b>-4</b> -8
13	34.09	44.93	+3 +6	26.25	40.73	+5 - 4	20.68	32.63	+2 -8	17.79	21.54	-5 -5
14	33.83	44.88	+5 +4	26.02	40.51	+3 - 7	20.53	32.30	∘ −9	17.76	21.17	-5 -2
15	33.56	44.83	+5 +1	25.79	40.28	+1 - 9	20.39	31.97	-3 -9	17.73	20.79	-3 -2
16	33.30	44.77	+5 -2	25.57	40.05	-r -ro	20.25	31.63	-4 -7	17.70	20.42	-ı +5
17	33.03	44.70	+4 -6	25.35	39.81	-3 - 9	20.11	31.29	-5 -4	*)17.68	20.04	+2 +6
18	32.77	44.63	+2 -8	25.13	39.57	-5 - 6	19.98	30.95	-4 0	17.67	19.67	+4 +6
19	32.51	44.55	∘ −9	24.91	39.33	-5 - 2	19.85	30.61	<b>−2</b> ±3	17.65	19.30	+5 +4
20	32.24	44.46	-3 -9	24.70	39.08	-4 + 2	19.72	30.26	0 +6	17.65	18.93	+6 +1
21	31.98	44.37	-4 -7	24.48	38.83	-2 + 5	19.60	29.92	+3 +7	17.64	18.55	+4 -2
22	31.72	44.28	-5 -4	24.28	38.57	+1 +7	19.48	29.57	+5 +6	17.64	18.18	+2 -5
23	31.45	44.18	<b>−5</b> ∘	24.07	38.31	+3 + 7	19.36	29.22	+6 +3	17.65	17.81	-ı -6
24	31.19	44.07	-3 +4	23.87	38.04	+5 + 5	19.25	28.87	+5 0	17.66	17.44	<b>−3 −5</b>
25	30.93	43.95	0 +7	23.66	37.77	+5 + 2	19.14	28.51	+3 -3	17.67	17.07	<b>−</b> 5 <b>−</b> 3
26	30.67	43.83	+2 +8	23.47	37.49	+4 - 1	19.04	28.16	+r -5	17.68	16.70	-6 0
27	30.41	43.70	++ +7	23.27	37.22	+2 - 4	18.94	27.80	-2 - <sub>5</sub>	17.70	16.33	-6 +3
28	30.16	43.57	-1-5 -1-4	23.08	36.93	-r - 5	18.84	27.44	-4 -4	17.72	15.96	<b>-4</b> +6
29	29.90	43.43	+5 +1	22.89	36.65	-3 - 5	18.75	27.08	-6 -2	17.75	15.59	-2 +8
30	29.65	43.29	+3 -2	22.70	36.36	-5 - 3	18.66	26.72	-6 +ı	17.78	15.23	0 +8
31	29.39	43.14	+1 -5	1			18.57	26.35	-5 +4	17.82	14.87	+2 +8
32	29.14	42.99	-2 -5				18.49	25.99	<b>−3</b> +7			

 $\alpha_{1940,0} = 1^{\text{h}} 40^{\text{m}} 39.77$   $\delta_{1940,0} = -85^{\circ} 4' 24.43$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: April 17.

#### Obere Kulmination Greenwich

Sa) 4 G. Octantis 5<sup>m</sup>63

		M. :		· ·	Tuni	4 u. ou	1			Angust		
Tag		Mai			Juni	l = 011 1		Juli			Augus	
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		=	in		-	in		-	in		-	in
	1 <sup>h</sup> 40 <sup>m</sup>	85° 4′	0.01 0.01	1 40 m	85° 3′	0.01 0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 3′	0.01 0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 3′	0.01 0.01
1	17.82	14.87	+2 +8	20.79	64.60	+5 -2	26.53	57.90	∘ −8	33.97	55.93	-5 -4
2	17.86	14.50	+4 +6	20.94	64.31	+3 -5	26.76	57.75	-2 -8	34.21	55.96	-4 0
3	17.90	14.14	+5 +3	21.10	64.03	+2 -7	26.99	57.61	-4 -7	34.46	56.00	-2 +4
4	17.95	13.78	+5 0	21.25	63.75	○ -8	27.22	57-47	<b>−</b> 5 −5	34.70	56.04	0 +6
5	18.00	13.42	+4 -3	21.42	63.47	-2 <del>-</del> 8	27.45	57-33	-5 -2	34.94	56.09	+2 +7
6	18.06	13.06	+3 -6	21.58	63.20	-4 -7	27.68	57.21	-4 + <b>2</b>	35.18	56.14	+4 +6
7	18.12	12.71	+1 —8	21.75	62.94	-5 -4	27.91	57.09	-2 +5	35.42	56.20	+5 +-3
8	18.18	12.36	-r -8	21.92	62.67	-4 0	28.14	56.97	+1 +7	35.65	56.27	+5 0
9	18.25	12.01	-3 -8	22.09	62.42	-3 + 3	28.38	56.86	+3 +7	35.89	56.34	+3 -3
10	18.32	11.66	-4 -6	22.26	62.16	<b>-1</b> +6	28.62	56.76	+5 +5	36.13	56.42	15
II	18.39	11.31	<u>−5</u> −3	22.44	61.91	+2 +7	28.85	56.66	+6 +2	36.36	56.50	-2 -6
12	18.47	10.96	-4 +I	22.62	61.67	+4 +6	29.09	56.57	+5 -I	36.59	56.59	-4 -5
13	18.55	10.62	-2 +4	22.80	61.43	+5 +3	29.33	56.48	+3 -4	36.83	56.68	-5 <b>-2</b>
14	18.64	10.28	0 +6	22.99	61.20	+5 0	29.57	56.40	∘ −6	37.06	56.78	<b>−</b> 6 +-1
15	18.73	9.94	+3 +6	23.18	60.96	+4 -3	29.82	56.33	-2 -6	37.29	56.89	-5 +4
16	18.82	9.60	5 +5	23.37	60.74	+2 -5	30.06	56.26	-4 -4	37.51	57.00	-3 +6
17	18.92	9.27	+6 +2	23.57	60.52	-ı —6	30.30	56.19	-6 -2	37.74	57.11	-r +7
18	19.02	8.94	+5 -1	23.76	60.30	-3 -6	30.54	56.13	-5 +1	37.96	57.24	+-r +8
19	19.12	8.61	+3 -4	23.96	60.08	-5 -3	30.79	56.08	-4 +4	38.18	57.36	+3 +7
20	19.23	8.28	+1 -6	24.17	59.88	<b>−</b> 6 o	31.03	56.03	-2 + <sub>7</sub>	38.40	57.50	+4 +5
21	19.34	7.96	<b>-2</b> -6	24.37	59.67	-5 +3	31.28	55.99	0 +8	38.62	57.64	+5 +2
22	19.45	7.64	-4 -5	24.58	59.47	-4 +6	31.52	55.96	+2 +7	38.84	57.79	+5 -1
23	19.57	7.32	<u>−6</u> −2	24.79	59.28	-2 +7	31.77	55.93	+3 +6	39.05	57.94	+4 -4
24	19.69	7.00	-6 + 1	25.00	59.09	○ +8	32.01	55.91	+5 +4	39.26	58.09	<b>2 7</b>
25	19.82	6.69	<u>-5</u> +4	25.21	58.90	+2 +7	32.26	55.89	+5 +1	39.47	58.25	0 -9
26	19.94	6.38	-3 + <sub>7</sub>	25.43	58.72	+4 +5	32.50	55.88	+5 -2	39.68	58.42	-2 -9
27	20.08	6.07	-ı +8	25.65	58.55	+5 +2	32.75	55.87	+3 -6	39.88	58.59	<b>-</b> 4 -8
28	20.21	5.77	+1 +8	25.87	58.38	+5 —I	32.99	55.87	+2 -8	40.08	58.77	-5 -5
29	20.35	5.47	+3 +7	26.09	58.21	+4 -4	33.24	55.88	-ı -9	40.28	58.95	-5 -2
30	20.49	5.18	+5 +4	26.31	58.05	+2 -6	33.48	55.89	<b>−3 −8</b>	40.48	59.14	-4 +2
31	20.64	4.88	+5 +1	26.53	57.90	∘ −8	33.73	55.91	-4 -7	40.67	59.33	-ı +5
32	20.79	4.60	+5 -2				33.97	55-93	-5 -4	40.86	59.53	+1 +6
0-							00.91	00-90			107.00	

 $\alpha_{1940,0} = 1^h 40^m 39^{s}.77$   $\delta_{1940,0} = -85^{\circ} 4' 24.43$ 

Obere Kulmination Greenwich

Sa) 4 G. Octantis 5 <sup>m</sup> .63
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			h			4 U. Octa		Norrami	\	1	D	
Tag		Septem			Oktob			Novemb			Dezemb	
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		-	in		_	in		-	in			in
	1 40 m	85° 3′	0.01 0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 4′	0.01 0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 4′	0.01 0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 4′	10.01
I	40.86	59-53	+1 +6	44.92	7.33	+6 +2	44.88	17.58	-3 -6	40.64	25.59	-6 +2
2	41.05	59.73	+4 +6	44.99	7.63	+5 -1	44.80	17.89	-5 -3	40.44	25.80	_5 ±5
3	41.23	59.94	+5 +4	45.05	7.95	+3 -4	44.72	18.20	-6 0	40.24	25.99	-3 + 8
4	41.42	60.15	+6 +1	45.12	8.26	+1 -6	44.63	18.51	-5 ±4	40.03	26.19	0 +9
5	41.59	60.37	+5 -2	45.18	8.57	<b>-2</b> -6	44.53	18.82	-4 +-7	39.83	26.38	+2 +9
6	41.77	60.59	+2 -4	45.23	8.89	-4 -4	44.44	19.12	-2 +9	39.62	26.56	+4 +7
7	41.94	60.81	-ı -6	45.28	9.21	_6 <b>_</b> 1	44.34	19.42	+1 +9	39.41	26.74	+5 +4
8	42.11	61.04	-3 -5	45.32	9.52	-6 +2	44.23	19.72	+3 +8	39.19	26.91	+5 +1
9	42.27	61.27	-5 -3	45.36	9.85	<u>-5</u> +5	44.12	20.02	+4 +6	38.97	27.08	+4 -2
10	42.43	61.51	<b>−</b> 6 ∘	45.40	10.17	<b>−3</b> +8	44.00	20.31	+5 +3	38.75	27.24	+3 -5
11	42.59	61.75	-5 + 3	45.43	10.49	-ı +9	43.88	20.60	+5 0	38.53	27.39	+1 -7
12	42.74	62.00	-4 +6	45.46	10.82	+1 +8	43.76	20.88	+4 -3	38.30	27.54	-ı -8
13	42.89	62.25	<b>-2</b> +8	45.48	11.14	+3 +7	43.63	21.16	+2 -6	38.07	27.69	-3 -7
14	43.04	62.50	0 +8	45.50	11.47	+4 +4	43.50	21.44	∘ −7	37.84	27.83	-4 -6
15	43.18	62.76	+2 +7	45.51	11.79	+5 +1	43.36	21.72	<b>−2</b> −8	37.61	27.96	-5 -3
16	43.32	63.02	+4 +6	145.52 145.52	12.12	+4 -2 } +3 -5 J	43.22	21.99	-3 -7	37.37	28.09	-4 0
17	43.45	63.29	+5 +3	45.51	12.77	+2 -7	43.07	22.26	-4 -5	37.13	28.21	-3 + 3
18	43.59	63.55	+5 0	45.50	13.09	∘ −8	42.92	22.52	-5 -2	36.89	28.32	-ı +5
19	43.71	63.83	+4 -3	45.49	13.42	<b>−2 −8</b>	42.77	22.78	-+ +1	36.65	28.43	+2 +6
20	43.84	64.10	+3 -6	45.47	13.75	-4 -7	42.61	23.04	-2 +4	36.40	28.53	+4 +5
21	43.96	64.38	+r -8	45.45	14.07	-5 -5	42.45	23.29	0 +5	36.15	28.62	+5 +3
22	44.07	64.66	-r -9	45.42	14.40	-4 -2	42.28	23.54	+3 +5	35.91	28.71	+5 -1
23	44.19	64.95	-3 -8	45.39	14.72	-3 + 2	42.11	23.79	+5 +4	35.66	28.80	+4 -4
24	44.29	65.24	-4 -6	45.35	15.04	-I +4	41.94	24.03	+6 +1	35.41	28.88	+2 -6
25	44.39	65.53	-5 -4	45.31	15.37	+2 +6	41.77	24.27	+5 -2	35.16	28.95	-ı -7
26	44.49	65.82	-4 0	45.26	15.69	+4 +5	41.59	24.50	+3 -5	34.91	29.02	-3 -6
27	44.59	66.12	-2 +3	45.21	16.00	+5 +3	41.41	24.73	+1 -7	34.65	29.08	-5 -4
28	44.67	66.41	0 +5	45.15	16.32	+6 0	41.22	24.95	-2 -7	34.40	29.13	-6 o
29	44.76	66.72	+3 +6	45.09	16.64	+5 -3	41.03	25.17	-4 -5	34.14	29.18	<u>-5</u> ⋅ +3
30	44.84	67.02	+5 +5	45.02	16.96	+2 -6	40.84	25.38	-6 -2	33.89	29.22	-3 +6
31	44.92	67.33	+6 +2	44.95	17.27	-ı -7	40.64	25.59	-6 +2	33.63	29.25	-ı +8
_32				44.88	17.58	-3 -6				33-37	29.28	+1 +9
	,		2 2 2 2	, , ,			0   0	0 1	- 0		2 4 2	

$$\alpha_{1940.0} = r^h 40^m 39.77$$

$$\alpha_{1940.0} = r^{h} 40^{m} 39^{5}77$$
 $\delta_{1940.0} = -85^{\circ} 4' 24.43$ 

Obere Kulmination Greenwich

Sb)	Ε	Mensae	5 <sup>m</sup> 85
00)	-	птензас	3.03

m <sub>e</sub>		Janua	r		Februa	ır		März		April		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		=	in		_	in		_	in		_	in
	5 <sup>h</sup> 5 <sup>m</sup>	82° 33′	0.01 0.01	5 <sup>h</sup> 5 <sup>m</sup>	82° <b>3</b> 3′	10.0 10.0	5 <sup>h</sup> 5 <sup>m</sup>	82° 33′	0.01 0.01	5 <sup>h</sup> 5 <sup>m</sup>	82° 33′	10,0
I	45.16	30.01	+1 +7	41.01	37.42	+1 -5	35.69	40.06	-ı - <sub>7</sub>	29.85	37.96	-3 0
2	45.06	30.31	+2 +4	40.84	37.59	∘ −7	35.50	40.07	-2 -7	29.68	37.81	-3 +3
3	44.96	30.61	+2 0	40.67	37.75	-r -7	35.30	40.08	-3 -5	29.50	37.66	<b>-2</b> +5
4	44.86	30.90	+2 -3	40.50	37.90	<b>−2</b> −6	35.11	40.08	-3 -2	29.32	37.50	-ı +7
5	44.76	31.19	+1 -6	40.32	38.05	-3 -4	34.92	40.07	-3 +1	29.15	37.34	o <del>+</del> 7
6	44.65	31.47	0 -7	40.15	38.20	-3 -ı	34.72	40.06	-z +3	28.98	37.18	+1 +6
7	44.54	31.75	<b>-2 -7</b>	39.98	38.34	-3 +2	34.53	40.05	-ı +6	28.81	37.01	+2 +4
8	44.42	32.03	-2 -5	39.80	38.47	-2 +4	34-33	40.03	0 +6	28.64	36.84	+3 +2
9	44.31	32.30	-3 -3	39.62	38.60	<b>-</b> 1 +6	34.14	40.00	+r +6	28.48	36.66	+3 -1
10	44.19	32.57	-3 0	39.44	38.72	o +7	33.95	39.97	+2 +5	28.31	36.47	+3 -4
II	44.07	32.84	-2 +3	39.26	38.84	+1 +6	33.76	39.93	+3 +4	28.15	36.29	+2 -6
12	43.95	33.10	-2 + <sub>5</sub>	39.08	38.95	+2 +5	33.56	39.89	+3 +1	27.99	36.10	+r —8
13	43.82	33.36	0 +6	38.90	39.06	+3 +3	33.37	39.84	+3 -2	27.83	35.90	0 -7
14	43.69	33.62	+1 +7	38.71	39.16	+3 0	33.18	39.79	+2 -5	27.67	35.70	-r -5
15	43.56	33.87	+2 +6	38.53	39.26	+3 -4	32.99	39.73	+2 -7	27.51	35.50	-2 -2
16	43.42	34.11	+3 +4	38.34	39.35	+2 -6	32.80	39.67	○ -8	27.36	35.29	-2 + 1
17	43.29	34.36	+3 +1	38.16	39.43	+1 $-8$	32.60	39.60	-ı - <sub>7</sub>	27.21	35.08	-1 +5
18	43.15	34.59	+3 -2	37.97	39.51	∘ −8	32.41	39.52	-2 -4	27.06	34.87	0 +7
19	43.01	34.82	+3 -5	37.78	39.59	−r <b>−</b> 6	32.23	39.44	-2 -I	26.91	34.65	+r +8
20	42.87	35.05	+2 -7	37.59	39.66	-2 -3	32.04	39.36	-2 +3	26.76	34.43	+2 +6
21	42.72	35.28	+1 -8	37.41	39.72	-2 +I	31.85	39.27	-ı +6	26.61	34.20	+2 +3
22	42.58	35.49	-I -7	37.22	39.78	-2 + 5	31.67	39.17	0 +8	26.47	33.97	+2 0
23	42.43	35.71	-2 -4	37.03	39.84	-ı +7	31.48	39.07	+r +7	26.33	33.73	+1 -4
24	42.28	35.92	-2 -I	36.84	39.89	0 +8	31.30	38.97	+2 +5	26.19	33.49	∘ −6
25	42.13	36.13	<b>-2</b> +3	36.65	39.93	+1 +7	31.12	38.86	+2 +1	26.05	33.25	_ı _ <sub>7</sub>
26	41.97	36.33	-r +6	36.46	39.97	+2 +4	30.93	38.75	+2 -2	25.92	33.00	-2 -7
27	41.82	36.52	0 +8	36.27	40.00	+2 0	30.75	38.63	+1 -5	25.79	32.76	-3 -4
28	41.66	36.71	+1 +8	36.07	40.02	+1 -3	30.57	38.51	∘ −7	25.66	32.50	-3 -1
29	41.50	36.90	+2 +6	35.88	40.05	∘ −6	30.39	38.38	-2 -7	25.53	32.25	-3 +2
30	41.34	37.08	+2 +2	35.69	40.06	-1 -7	30.21	38.25	-3 -5	25.40	31.99	<b>-2</b> +4
31	41.17	37.25	+2 -2				30.03	38.11	-3 -3	25.27	31.73	<b>-1</b> +6
32	41.01	37.42	+1 <u>-5</u>				29.85	37.96	−3 ∘			

 $\alpha_{1940.0} = 5^{\text{h}} 5^{\text{m}} 37.66$   $\delta_{1940.0} = -82^{\circ} 33' 13.98$ 

#### Obere Kulmination Greenwich

					Sb)	ξ Mensa	e 5.8	35				-
m		Mai		Juni			Juli				Augus	t
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		=	in		-	in		-	in		_	in
	5 <sup>h</sup> 5 <sup>m</sup>	82° 33′	0.01 0.01	5 <sup>h</sup> 5 <sup>m</sup>	82° 33′	0.01 0.01	5 <sup>h</sup> 5 <sup>m</sup>	82° 33′	0.01 0.01	5 <sup>h</sup> 5 <sup>m</sup>	82° 32′	0.01 0.01
I	25.27	31.73	-ı +6	22.65	22.37	+2 +4	22.67	12.47	+3 -4	25.28	63.82	-ı <del>-</del> 7
2	25.15	31.46	o ±7	22.61	22.04	+3 +1	22.72	12.15	+2 -6	25.40	63.60	-2 -4
3	25.03	31.19	+1 +6	22.57	21.71	+3 -2	22.77	11.83	+1 -7	25.53	63.38	-2 -I
4	24.91	30.92	+2 +5	22.54	21.38	+2 -5	22.82	11.52	o —7	25.65	63.17	-2 + 3
5	24.79	30.64	+3 +3	22.50	21.05	+1 -7	22.87	11.21	—ı —6	25.78	62.96	-ı +6
6	24.68	30.37	- <del>-</del> 3 0	22.47	20.72	0 -8	22.93	10.90	-2 -3	25.91	62.75	0 +8
7	24.57	30.09	+3 -3	22.45	20.38	-r -7	22.99	10.59	-2 + 1	26.04	62.55	+r +7
8	24.46	29.80	+2 -5	*)22.42	20.05	-2 -4	23.05	10.29	-2 +4	26.18	62.35	+2 +5
9	24.36	29.52	+1 -7	22.40	19.72	-2 -I	23.11	9.98	-ı +7	26.31	62.16	+2 +2
10	24.25	29.23	∘ −7	22.38	19.39	<b>-2 +2</b>	23.18	9.68	0 +8	26.45	61.97	+2 -2
11	24.15	28.94	-ı -6	22.36	19.05	-ı +5	23.25	9.38	+1 +6	26.59	61.79	+r -5
12	24.05	28.65	-2 -4	22.35	18.72	o +7	23.32	9.08	+2 +4	26.73	61.62	○ -6
13	23.96	28.35	<b>−2</b> 0	22.34	18.39	+1 +7	23.39	8.79	+2 0	26.88	61.45	-ı - <sub>7</sub>
14	23.87	28.05	-2 + 3	22.34	18.05	+2 +5	23.47	8.50	+2 -3	27.02	61.28	-2 <b>-</b> 6
15	23.78	27.75	—ı ⊹6	22.33	17.72	+2 +2	23.55	8.21	+1 -6	27.16	61.12	-3 -3
16	23.69	27.45	0 +8	22.33	17.38	+2 -1	23.63	7.93	0 -7	27.31	60.97	<u>-3</u> o
17	23.60	27.14	+1 +7	22.34	17.05	+1 -4	23.72	7.65	-2 -7	27.46	60.82	-3 + 3
18	23.52	26.84	+2 +5	22.34	16.72	∘ −6	23.80	7.37	-3 -5	27.61	60.67	-2 +5
19	23.44	26.53	+2 +I	22.35	16.39	<b>−</b> 1 <b>−</b> 7	23.89	7.09	-3 -2	27.76	60.53	—ı +6
20	23.36	26.22	+2 -3	22.36	16.05	-2 -6	23.99	6.82	-3 +I	27.91	60.40	o +7
21	23.29	25.91	+1 -6	22.37	15.72	-3 -4	24.08	6.55	-2 ±4	28.06	60.27	+r +6
22	23.22	25.60	o -7	22.39	15.39	−3 −ı	24.18	6.28	—r +-6	28.21	60.15	+2 +4
23	23.15	25.28	-2 -7	22.41	15.06	-3 +2	24.28	6.02	o +7	28.37	60.03	+3 +2
24	23.08	24.96	-3 -5	22.43	14.73	-2 +4	24.38	5.76	+1 +7	28.53	59.92	+3 -1
25	23.02	24.64	-3 -3	22.46	14.41	—ı +6	24.49	5.51	+2 +5	28.68	59.81	+3 -4
26	22.96	24.32	-3 0	22.49	14.08	o ±7	24.60	5.25	+2 +4	28.84	59.71	+2 -6
27	22.90	24.00	-3 + 3	22.52	13.76	+1 +6	24.71	5.01	+3 +1	29.00	59.62	+r <b>-</b> 8
28	22.85	23.67	<b>−2</b> +6	22.56	13.43	+2 +5	24.82	4.76	+3 -2	29.16	59.53	∘ −7

tg 8 δ sec 8 tg δ δ sec 8 δ sec δ tg 8 -82° 32′ 50′′ -82° 33′ 30″ 7.710 -7.644-82° 33′ 10′′ 7.715 -7.6507.721 -7.65660 7.712 -7.647 20 7.718 -7.6537.724

+3 +2

+3 -4

24.93

25.04

25.16

25.28

 $\alpha_{1940,0} = 5^h 5^m 37.66$ 

22.59 13.11

22.63

22.67

0 +7

+1 +6

+2 +4

12.79

12.47

 $\delta_{1940.0} = -82^{\circ} 33'$  13."98

4.52

4.28

4.05

3.82

29.32

29.49

29.65

29.81

59.45

59.37

59.30

59.24

-r +5



29

30

31

32

22.79

22.74

22.70

22.65 | 22.37

23.35

23.02

22.70

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Juni 8.

#### Obere Kulmination Greenwich

Sb) & Mensae 5 <sup>m</sup> .	85
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					50)	2 Mens	1					
Tag		Septeml	ber		Oktob	er		Novemi	ber		Dezemb	er
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		_	in		_	in		-	in		-	in
	5 <sup>h</sup> 5 <sup>m</sup>	82° 32′	0.01 0.01	5 <sup>h</sup> 5 <sup>m</sup>	82° 33′	0.01 0.01	5 <sup>h</sup> 5 <sup>m</sup>	82° 33′	0.01 0.01	5 <sup>h</sup> 5 <sup>m</sup>	82° 33′	0.01 0.01
1	29.81	59.24	-r +5	34.75	0.19	+1 +7	38.80	6.68	+r <b>-</b> 4	40.38	16.36	-2 -7
2	29.98	59.18	0 +7	34.90	0.32	+2 +5	38.90	6.96	06	40.38	16.71	-3 -5
3	30.14	59.13	+1 +8	35.05	0.45	+2 +-2	38.99	7.25	-r -7	40.39	17.05	-3 -2
4	30.31	59.08	+2 +6	35.21	0.59	+2 -2	39.08	7.54	-2 -6	40.38	17.40	-3 + 1
5	30.47	59.04	+2 +4	35.36	0.74	+r -5	39.17	7.84	-3 -4	40.38	17.74	-3 +4
6	30.64	59.01	+2 0	35.51	0.89	∘ −7	39.25	8.13	-3 0	40.37	18.09	-2 +6
7	30.80	58.98	+r -3	35.66	1.04	-2 -7	39.33	8.44	-3 + 3	{ 40.36 { 40.34	18.43 18.78	-1 +7) o +7
8	30.97	58.96	0 -6	35.81	1.21	-3 -5	39.41	8.74	-2 + <sub>5</sub>	40.32	19.12	+ <b>1</b> +5
9	31.13	58.94	-ı - <sub>7</sub>	35.95	1.38	<b>−3 −2</b>	39.49	9.05	-ı +7	40.30	19.46	+2 +3
10	31.30	58.93	-2 -6	36.10	1.55	-3 +I	39.56	9.36	o +7	40.27	19.80	+2 0
II	31.47	58.93	-3 -4	36.24	1.73	-3 -1-4	39.63	9.68	+1 +6	40.24	20.15	2 -3
12	31.64	58.93	-3 -I	36.39	1.92	-2 +6	39.70	10.00	+2 +5	40.21	20.49	+2 -5
13	31.80	58.95	-3 +2	36.53	2.11	<b>-</b> 1 +7	39.76	10.32	+2 +2	40.17	20.82	+r <b>-</b> 7
14	31.97	58.96	-2 +4	36.67	2.30	o +7	39.82	10.64	+2 0	40.13	21.16	∘ −7
15	32.14	58.99	-ı +6	36.80	2.51	+1 +5	39.88	10.97	+2 -3	40.09	21.50	-ı -6
16	32.31	59.02	0 +7	36.94	2.71	-1-2 +4	39.93	11.29	+2 -6	40.04	21.83	-2 -4
17	32.47	59.05	+1 +6	37.07	2.92	+2 +I	39.98	11.62	+1 -7	39.99	22.17	-2 -I
18	32.64	59.09	+2 +5	37.20	3.14	<b>-3 -2</b>	40.03	11.95	∘ −7	39.94	22.50	-2 - -2
19	32.80	59.14	+2 +3	37.33	3.36	+2 -4	40.08	12.28	-16	39.88	22.83	—r +5
20	32.97	59.19	+3 0	37.46	3.59	+1 -6	40.12	12.61	-2 -3	39.82	23.16	o +7
21	33.14	59.25	+3 -3	37.59	3.82	+ı <b>-</b> 8	40.16	12.95	<b>-2</b> 0	39.76	23.49	+1 +7
22	33.30	59.32	+2 -5	37.71	4.06	∘ −7	40.20	13.29	-1 +3	39.69	23.81	+2 +5
23	33.47	59.39	+ı −7	37.83	4.30	-ı -5	40.23	13.62	o +-6	39.62	24.13	+3 +2
24	33.63	59.47	o —8	37.95	4.55	-2 -2	40.26	13.96	+1 +7	39.55	24.45	+3 −1
25	33.79	59.56	-ı - <sub>7</sub>	38.06	4.80	-2 +I	40.29	14.30	+2 +6	39.48	24.77	+1 -4
26	33.96	59.65	-2 -4	38.18	5.06	-ı +5	40.31	14.64	+3 +4	39.40	25.08	o —7
27	34.12	59.74	-2 -I	38.29	5.32	o +7	40.33	14.98	+3 +1	39.32	25.39	-r -7
28	34-27	59.85	-ı +3	38.39	5.58	+r +7	40.35	15.33	+2 -3	39.24	25.70	-2 -6
29	34.43	59.96	-ı +6	38.50	5.85	+2 +6	40.36	15.67	+1 -6	39.15	26.01	-3 -4
30	34.59	60.07	o +7	38.60	6.12	+3 +3	40.37	16.02	o —7	39.06	26.31	<b>−</b> 3 ∘
31	34.75	60.19	+1 +7	38.70	6.40	+2 <b>-</b> 1	40.38	16.36	-2 -7	38.97	26.61	-3 +3
32				38.80	6.68	+1 -4		-		38.88	26.91	-2 + <u>5</u>

 $\alpha_{1940.0} = 5^{\text{h}} 5^{\text{m}} 37.866$   $\delta_{1940.0} = -82^{\text{h}} 33' 13.98$ 

32

6.57 | 40.73 | +3 +3

### Scheinbare Sternörter 1940

#### Obere Kulmination Greenwich

					Sc)	ζ Octan	tis 5	<sup>2</sup> 38				
Tag		Janua	r		Februa	ır		März			April	
rag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	1.54	-	in		-	in		_	in		-	in
	9 <sup>h</sup> 6 <sup>m</sup>	85° 25′	0.01 0.01	9 <sup>h</sup> 6 <sup>m</sup>	85° 25′	0.01 0.01	9 <sup>h</sup> 5 <sup>m</sup>	85° 25′	0.01 0.01	9 <sup>h</sup> 5 <sup>m</sup>	85° 26′	0.01 0.01
I	4.72	29.53	-5 +4	6.57	40.73	+3 +3	63.98	51.71	+4 -6	57.69	0.71	-3 -7
2	4.85	29.86	-4 +6	6.55	41.11	+4 0	63.83	52.05	+3 -8	57.44	0.94	-4 -5
3	4.98	30.19	-r +6	6.53	41.49	+4 -4	63.67	52.39	+1 -9	57.19	1.16	-5 -2
4	5.10	30.53	+1 +5	6.50	41.87	+4 -6	63.51	52.72	-r -8	56.94	1.38	-5 + 1
5	5.22	30.87	+3 +2	6.47	42.25	+2 -8	63.35	53.05	-3 -6	56.69	1.59	- <del>1</del> +4
6	5.33	31.21	+5 -1	6.43	42.63	0 -8	63.18	53.38	-4 -3	56.43	1.81	<b>-3</b> +6
7	5.44	31.56	+5 -4	1 6.39 1 6.34	43.01 43.39	$-2 -71 \\ -3 -51$	63.01	53.71	−5 <b>−</b> 1	56.17	2.01	-ı +7
8	5.55	31.91	+4 -7	6.29	43.76	-4 -2	62.83	54.03	<u>−5</u> +2	55.91	2.21	+1 +7
9	5.65	32.26	+2 -8	6.23	44.14	<b>-</b> 5 <b>+</b> 1	62.65	54.35	-4 +5	55.65	2.41	+3 +6
10	5.74	32.61	0 -8	6.17	44.51	-4 + <sub>4</sub>	62.47	54.66	-2 +7	55.39	2.61	+5 +4
II	5.83	32.96	-2 -6	6.10	44.89	-3 +6	62.29	54.98	0 +8	55.13	2.79	+6 +r
12	5.92	33.31	-4 -4	6.03	45.26	—ı +8	62.10	55.28	+2 +7	54.86	2.98	+6 -2
13	6.00	33.67	-5 <b>-</b> 1	5.95	45.63	+1 +8	61.91	55.59	+4 +6	54.59	3.16	+5 -4
14	6.07	34.03	-5 +2	5.87	46.00	+3 +7	61.71	55.89	+6 +4	54.32	3.33	+3 -5
15	6.14	34.39	-4 +5	5.78	46.37	+5 +5	61.51	56.19	+6 +1	54.05	3.50	∘ −5
τ6	6.21	34.76	-3 +7	5.69	46.74	+6 +2	61.31	56.48	+6 -3	53.78	3.67	-3 -3
17	6.27	35.12	-ı +8	5.60	47.11	+6 —ı	61.10	56.78	+4 -5	53.51	3.83	<b>−</b> 5 ∘
18	6.32	35.49	+2 +8	5.50	47.47	+5 -4	60.89	57.06	+1 -5	53.23	3.98	-5 +3
19	6.37	35.86	+4 +7	5.40	47.84	+3 -5	60.68	57.35	-2 -4	52.96	4.13	<b>-4</b> +6
20	6.42	36.23	+6 +4	5.29	48.20	∘ −6	60.46	57.63	-4 -2	52.68	4.28	-3 + <sub>7</sub>
21	6.46	36.60	+7 +1	5.18	48.56	<b>−</b> 3 <b>−</b> 4	60.25	57.91	-5 +1	52.41	4.42	o +7
22	6.49	36.97	+6 -3	5.06	48.91	-5 <b>-2</b>	60.03	58.18	-5 +4	52.13	4.55	+2 +4
23	6.52	37-34	+4 -5	4.94	49.27	-6 +2	59.81	58.45	<b>-4</b> +6	51.85	4.68	+4 +1
24	6.55	37.72	+1 -6	4.82	49.63	-5 +5	59.58	58.72	-2 +7	51.57	4.80	+5 -2
25	6.57	38.09	-2 -6	4.69	49.98	<i>-</i> 3 <i>+</i> 6	59.35	58.98	+1 +5	51.29	4.92	+4 -6
26	6.59	38.47	-4 -3	4.56	50.33	—ı +6	59.12	59.24	+3 +3	51.01	5.03	+3 -8
27	6.60	38.84	<b>−</b> 6 ∘	4.42	50.68	+2 +4	58.89	59.50	+4 -1	50.73	5.14	+1 -9
28	6.60	39.22	-6 + 3	4.28	51.03	+4 +1	58.66	59-75	+4 -4	50.44	5.24	<del>-2</del> -8
29	6.60	39.60	-5 ÷5	4.13	51.37	+5 -2	58.42	59.99	+4 -7	50.16	5.34	-4 -6
30	6.60	39.98	<b>−2</b> ±6	3.98	51.71	+4 -6	58.18	60.24	+2 -9	49.88	5.43	-5 -3
31	6.59	40.35	0 +5				57.94	60.47	∘ −9	49.60	5.52	<b>−</b> 5 ∘

 $\alpha_{1040.0} = 9^h \ 5^m \ 47.16$ 

 $\delta_{1940.0} = -85^{\circ} 25' 33''46$ 

57.69 | 60.71 | -3 -7

#### Obere Kulmination Greenwich

					Sc)	ζ Octa	ntis 5".	¹ <b>3</b> 8				
П		Mai			Juni			Juli			Augus	t
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		_	in		-	in		-	in		_	in
	9 <sup>h</sup> 5 <sup>m</sup>	85° 26′	0.01 0.0	9 <sup>h</sup> 5 <sup>m</sup>	85° 26′	0.01 0.0	9 <sup>h</sup> 5 <sup>m</sup>	85° 25′	10.0 10.01	9 <sup>h</sup> 5 <sup>m</sup>	85° 25′	0.01 0.01
1	49.60	5.52	-5 o	40.99	5.60	-r +7	34.20	61.02	+5 +4	30.42	52.70	+4 -5
2	49.31	5.60	-5 + 3	40.73	5.52	+2 +7	34.02	60.80	+6 +2	30.37	52.40	+1 -6
3	49.03	5.68	-4 +5	40.47	5.43	+3 +5	33.84	60.57	+6 -2	30.32	52.00	-2 -5
4	48.74	5.75	-2 +7	40.21	5.34	+5 +3	33.67	60.35	+5 -4	30.28	51.78	-4 -3
5	48.46	5.82	o +7	39.96	5.24	+6 0	33.50	60.11	+3 -6	30.24	51.48	<b>−</b> 5 ∘
6	48.17	5.88	+2 +6	39.71	5.14	+5 -3	33.33	59.88	0 -6	30.21	51.17	-5 +3
7	47.89	5.93	+4 +5	39.46	5.03	+4 -5	33.17	59.64	-3 -4	30.18	50.86	-4 +6
8	47.61	5.98	+6 +2	39.21	4.92	+2 -6	33.01	59.40	-5 -2	*)30.16	50.55	-2 +7
9	47.32	6.03	+6 —I	38.96	4.80	-ı - <u>5</u>	32.86	59.15	-5 + 2	30.14	50.24	+r +6
10	47.04	6.07	+5 -3	38.71	4.67	-3 -3	32.70	58.90	-5 +5	30.13	49.92	+3 +3
11	46.76	6.10	+3 -5	38.47	4.54	-5 o	32.56	58.65	-3 +6	30.12	49.61	+4 0
12	46.47	6.13	+1 -5	38.23	4.41	-5 +3	32.41	58.39	-ı +7	30.12	49.30	+4 -3
13	46.19	6.16	-2 -4	37.99	4.27	<del>-4 +6</del>	32.27	58.13	+2 +5	30.12	48.98	+4 -6
14	45.91	6.18	-4 -2	37.76	4.13	-2 +7	32.13	57.87	+4 +2	30.12	48.67	+2 -8
15	45.63	6.19	-5 +I	37.53	3.98	o +7	32.00	57.60	+5 -1	30.13	48.35	∘ −8
16	45.34	6.20	-5 +5	37.30	3.83	+3 +4	31.87	57.33	+4 -5	30.15	48.04	<b>−2 −7</b>
17	45.06	6.20	<b>−3</b> +7	37.07	3.67	+4 +1	31.75	57.06	+3 -7	30.17	47.73	-4 -5
18	44.79	6.20	-ı -ı-7	36.85	3.51	+5 -2	31.63	56.78	+1 -8	30.19	47.42	-5 -2
19	44.51	6.19	+1 +6	36.63	3.34	+4 -6	31.51	56.51	-ı -8	30.22	47.10	<b>-</b> 5 +1
20	44.23	6.18	+4 +3	36.41	3.17	+3 -8	31.40	56.23	-3 -6	30.26	46.79	-4 +4
21	43.96	6.16	+5 -1	36.19	3.00	∘ −8	31.29	55.95	-5 -4	30.30	46.48	-3 +6
22	43.68	6.14	+5 -4	35.98	2.82	-2 -8	31.19	55.66	-5 -I	30.34	46.17	-ı +7
23	43.41	6.11	+4 -7	35.77	2.64	-4 -6	31.09	55.37	-5 +2	30.39	45.86	+1 +7
24	43.14	6.07	+2 -9	35.56	2.45	-5 -3	31.00	55.08	-4 +5	30.44	45.55	+3 +6
25	42.87	6.03	-ı —9	35.36	2.26	<b>−</b> 5 ∘	30.91	54.79	-2 + <sub>7</sub>	30.50	45.24	+5 +4
26	42.59	5.99	-3 -7	35.15	2.06	-5 + 3	30.83	54.50	o +8	30.57	44.94	+6 +2
27	42.32	5.94	-5 -5	34.96	1.86	-3 + 6	30.75	54.20	+2 +7	30.63	44.63	+6 -2
28	42.06	5.88	-5 -2	34.76	1.66	<b>−2</b> +7	30.68	53.91	+4 +5	30.71	44.33	+5 -4
29	41.79	5.82	-5 +2	34.57	1.45	+1 +7	30.61	53.61	+6 +3	30.79	44.02	+3 -5
30	41.52	5-75	-4 +4	34.38	1.24	+3 +6	30.54	53.31	+6 0	30.87	43.72	o —5
21	41.26	5.68	<b>-3</b> +6	34.20	1.02	+5 +4	30.48	F2.00	+6 -3	20.06	12.42	-2 -4
31		5.60	-3 +6 $-1 +7$	34.20	1.02	+5 +4	30.40	53.00		30.96	43.42	-3 -4 -5 -1
32	40.99	5.00	-17	<u> </u>			1 30.42	52.70	+4 -5	31.05	43.12	<u>-5</u> -1

 $\alpha_{1940.0} = 9^h 5^m 47.16$ 

 $\delta_{1940.0} = -85^{\circ} 25' 33.46$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Aug. 8.

Obere Kulmination Greenwich

Sc)	ζ	Octantis	5 <sup>m</sup> 38
20,	~	Occurrens	3 - 30

П.		Septem	ber		Oktob	er	1	Novem	ber		Dezeml	er
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
			in		-	in		-	in			in
	9 <sup>h</sup> 5 <sup>m</sup>	85° 25′	10.01	9 <sup>h</sup> 5 <sup>m</sup>	85° 25′	10,0 10,0	9 <sup>h</sup> 5 <sup>m</sup>	85° 25′	10.01	9 <sup>h</sup> 5 <sup>m</sup>	85° 25′	0.01 0.01
I	31.05	43.12	-5 -I	35.85	35.59	-4 +7	43.75	32.39	+4 +2	51.81	35.10	+3 -7
2	31.15	42.82	-5 +2	36.07	35.40	-ı +7	44.03	32.39	+5 -2	52.06	35.29	+1 -9
3	31.25	42.53	-5 -1-5	36.29	35.22	+1 +6	44.31	32.39	+4 -6	52.30	35.48	-r -9
4	31.36	42.24	-3 + <sub>7</sub>	36.52	35.04	+3 +3	44.59	32.40	+2 -9	52.53	35.68	-4 -7
5	31.47	41.95	—ı +6	36.75	34.87	+4 0	44.86	32.42	0 -9	52.77	35.89	<u>−5</u> −4
6	31.59	41.66	+2 +5	36.98	34.70	-1-44	45.14	32.44	-2 -8	53.00	36.10	-6 -ı
7	31.71	41.38	+4 +2	37.21	34.54	- -37	45.42	32.47	-4 -6	53.23	36.31	<b>−</b> 5 +2
8	31.83	41.09	+5 -2	37.45	34.38	+1 -9	45.70	32.51	-6 -3	53.46	36.53	<u>-4</u> +4
9	31.96	40.82	+4 -6	37.69	34.23	-ı -9	45.98	32.55	<u>−</u> 6 ∘	53.68	36.76	<b>-2</b> +6
10	32.09	40.54	+2 -8	37.93	34.08	-3 -7	46.26	32.60	-5 +3	53.90	36.99	○ -1-6
ΙI	32.23	40.27	∘ −9	38.18	33.94	-5 -5	46.54	32.65	-4 +5	54.12	37-23	+2 +6
12	32.37	40.00	-2 -8	38.42	33.80	-5 -2	46.81	32.72	<b>-2</b> +6	54.33	37-47	44
13	32.52	39.73	-4 -6	38.68	33.68	-5 + 1	47.09	32.79	+1 +6	54.54	37.71	+5 +2
14	32.67	39-47	-5 -3	38.93	33.55	-4 +4	47.36	32.86	+2 +5	54.74	37.97	+6 <b>-</b> 1
15	32.82	39.21	<u>-5</u> 0	39.18	33.44	-3 +6	47.64	32.94	+4 +4	54.95	38.22	+5 -3
16	32.98	38.95	<del></del> 5 +3	39.44	33.33	<b>-</b> 1 +6	47.91	33.03	+5 +1	55.14	38.48	+4 -5
17	33.14	38.70	<b>-</b> 4 -l-5	39.70	33.22	+1 +6	48.18	33.13	-⊦-6 —ı	55.34	38.75	-ı -5
18	33.31	38.45	<b>−2</b> +6	39.95	33.12	+3 +5	48.45	33.23	+5 -3	55.53	39.02	-I -5
19	33.48	38.20	o ±7	40.22	33.03	+5 +3	48.72	33.34	+3 -5	55.72	39.30	-3 -3
20	33.66	37.96	+2 +6	40.48	32.94	+6 +1	48.99	33.45	+1 -5	55.90	39.58	-4 0
21	33.84	37.72	+4 +5	40.75	32.86	+6 -2	49.26	33.57	-2 -4	56.08	39.86	<b>−</b> 5 +3
22	34.03	37.49	+6 +3	41.02	32.79	44	49.52	33.70	-4 -1	56.26	40.15	<b>-4</b> +6
23	34.21	37.26	+6 0	41.28	32.72	+2 -5	49.78	33.83	-5 +2	56.43	40.44	-2 +7
24	34.41	37.04	+6 -3	41.55	32.66	o —5	50.04	33.97	-4 +5	56.60	40.74	+1 +7
25	34.60	36.82	+4 -5	41.83	32.61	-3 -3	50.30	34.12	<b>−3</b> +7	56.76	41.04	+3 +5
26	34.80	36.60	+1 -5	42.10	32.56	-4 0	50.56	34.27	-r +8	56.92	41.34	+4 +2
27	35.00	36.39	-2 -4	42.37	32.51	-5 +3	50.82	34.42	+2 +6	57.07	41.65	+5 -2
28	35.21	36.18	<u>-4</u> -2	42.65	32.48	-4 +6	51.07	34.58	+4 +3	57.22	41.96	+4 -6
29	35.42	35.98	-5 +I	42.92	32.45	<b>−2</b> +8	51.32	34.75	+5 0	57.37	42.28	+2 -8
30	35.63	35.78	-5 +4	43.20	32.42	o +7	51.57	34.92	+5 -4	57.51	42.60	0 -9
31	35.85	35.59	-4 + <sub>7</sub>	43.48	32.40	+3 +5	51.81	35.10	+3 -7	57.65	42.92	-2 -8
32			11 1 1-	43.75	32.39	+4 +2				57.78	43.25	<u>-4 -5</u>

$$\alpha_{1940,0} = 9^h 5^m 47.16$$

$$\alpha_{1940,0} = 9^{h} 5^{m} 47.16$$
 $\delta_{1940,0} = -85^{\circ} 25' 33.46$ 

#### Obere Kulmination Greenwich

Sd)	L	Octantis	5 <sup>m</sup> .38
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_	l .	~		1	Echanics 5.30						1 4 2			
Tag		Janua		Februar			März				April			
_	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder		
		-	ai		-	in		-	in		-	in		
	12 <sup>h</sup> 48 <sup>m</sup>	84°47′	0.01 0.01	12 <sup>h</sup> 48 <sup>m</sup>	84° 47′	0.01 0.01	12 <sup>h</sup> 48 <sup>m</sup>	84° 47′	0.01 0.01	12 <sup>h</sup> 48 <sup>m</sup>	84° 47′	10.01		
I	34.17	34.10	-5 -3	41.84	39.08	0 + 5	47.10	47.79	+4 +3	49.62	59.18	+5 -7		
2	34.43	34.18	<b>−</b> 5 ∘	42.07	39.33	+2 + 4	47.23	48.13	+6 0	49.65	59.55	+3 -8		
3	34.69	34.25	-4 + 3	42.28	39.58	+5 + 2	47.36	48.48	+6 -3	49.67	59.93	+r -8		
4	34.96	34.34	-2 +5	42.50	39.84	+6 0	47.49	48.83	+6 -5	{ 49.69 { 49.70	60.30 60.68	-1 -7 -7 -7 -3 -5 = -7 -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -5 = -7 -7 -5 = -7 -7 -7 = -7 -7 = -7 -7 = -7 -7 = -7 -7 = -7 -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7 = -7		
5	35.22	34.43	o +5	42.71	40.10	+6 - 3	47.61	49.19	+4 -7	49.71	61.05	-5 -2		
6	35.48	34.53	+3 +4	42.92	40.36	+5 - 6	47.73	49.54	+2 -8	49.72	61.42	-5 +I		
7	35.74	34.63	+5 +2	43.13	40.63	+4 - 7	47.85	49.90	○ -7	49.72	61.80	-5 + <sub>4</sub>		
8	36.01	34.74	+6 −ı	43.33	40.90	+1 - 7	47.96	50.26	<b>-2</b> -6	49.72	62.17	<b>−</b> 4 +7		
9	36.27	34.86	+6 -4	43.53	41.18	-I - 7	48.07	50.62	-4 -3	49.71	62.54	-2 +8		
10	36.52	34.98	+5 -6	43.73	41.46	-3 - 5	48.18	50.98	-5 -I	49.71	62.91	o +8		
II	36.78	35.11	+3 -7	43.93	41.74	-5 - 2	48.28	51.34	-5 +2	49.69	63.28	+2 +8		
12	37.04	35.24	+r <b>-</b> 7	44.12	42.03	-6 + ı	48.38	51.70	<u>-5</u> +5	49.68	63.64	+4 +5		
13	37.29	35.38	-2 -6	44.31	42.32	-6 + 4	48.48	52.07	<b>−4</b> +8	49.66	64.01	+52		
14	37.55	35.53	-4 -4	44.50	42.62	-5 + 7	48.57	52.44	-2 +9	49.64	64.38	41		
15	37.80	35.68	-5 -I	44.68	42.92	-3 + 9	48.66	52.81	○ +9	49.61	64.74	+3 -4		
16	38.05	35.84	<b>−</b> 6 <b>+</b> 2	44.87	43.22	-I +IO	48.74	53.18	+3 +7	49.59	65.10			
17	38.31	36.00	-6 + 5	45.04	43.53	+1 +9	48.83	53.55	+4 +4	49.55	65.46	-2 -5		
18	38.55	36.17	-4 + 8	45.22	43.83	+4 + 6	48.90	53.92	+5 +1	49.52	65.82	-4 -4		
19	38.80	36.35	<b>-2</b> +9	45.39	44.15	+5 + 3	48.98	54.29	+4 -3	49.48	66.17	-6 - 1		
20	39.05	36.53	0 +9	45.56	44.46	+5 - 1	49.05	54.66	+2 -5	49.44	66.53	<b>-6</b> - <b> -2</b>		
21	39.29	36.71	+3 +7	45.73	44.78	+3 - 4	49.12	55.03	∘ −6	49.39	66.88	-4 -1-5		
22	39.53	36.90	+4 +4	45.90	45.10	+r - 6	49.18	55.41	-3 -5	49.34	67.23	-2 -1.6		
23	39.78	37.10	+5 0	46.06	45.43	-r - 7	49.24	55.79	-5 -3	49.29	67.58	-l-I -l-5		
24	40.01	37.30	+5 -3	46.22	45.76	-4 - 5	49.30	56.16	<b>−</b> 6 ∘	49.24	67.93	43		
25	40.25	37.50	+3 -6	46.37	46.09	-5 - 2	49.35	56.54	-5 +3	49.18	68.27	-⊢6 o		
26	40.48	37.71	o <b>-7</b>	46.53	46.42	-5 + 1	49.40	56.92	<b>−3 +5</b>	49.12	68.62	+7 -3		
27	40.72	37.93	-3 -7	46.67	46.76	<u>-4 + 3</u>	49.45	57.29	0 +5	49.05	68.96	+6 -6		
28	40.94	38.15	-5 -4	46.82	47.10	-2 + 5	49.49	57.67	+3 +4	48.98	69.29	+4 -8		
29	41.17	38.37	-5 <b>-1</b>	46.96	47.44	+1 +5	49.53	58.05	+5 +2	48.91	69.63	+2 -9		
30	41.40	38.61	-5 +2	47.10	47.79	4 + 3	49.56	58.42	6 —ı	48.84	69.96	0 —8		
31	41.62	38.84	<b>−</b> 3 +4				49.60	58.80	+7 -5	48.76	70.29	<b>−2</b> −6		
32	41.84	39.08	0 +5				49.62	59.18	+5 -7					

 $\alpha_{1940.0} = 12^h 48^m 27.66$ 

 $S_{1940.0} = -84^{\circ} 47' 53.05$ 

#### Obere Kulmination Greenwich

Sd)	L	Octantis	5 <sup>m</sup> 38

m	+	Mai			Juni			Juli			Augus	t
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		_	in		_	in		_	in			in
	12 <sup>h</sup> 48 <sup>m</sup>	84° 48′	0.01 0.01	12 <sup>h</sup> 48 <sup>m</sup>	84° 48′	0.01 0.01	12 <sup>h</sup> 48 <sup>m</sup>	84° 48′	0.01 0.01	12 <sup>h</sup> 48 <sup>m</sup>	84° 48′	10.0 10.0
I	48.76	10.29	<b>-2</b> -6	44.84	18.87	-5 +5	39.01	23.05	0 +8	32.39	22.16	+-5 +-1
2	48.68	10.62	-4 -3	44.67	19.08	<b>−3</b> +7	38.80	23.10	+2 +8	32.19	22.04	-1-43
3	48.59	10.94	<b>−5</b> ∘	44.50	19.29	<b>-2</b> +8	38.59	23.15	+4 +5	31.98	21.92	+2 -6
4	48.50	11.26	-5 +3	44.33	19.49	o +8	38.37	23.20	+5 +2	31.79	21.79	∘ −6
5	48.41	11.58	<u>-4</u> +5	44.15	19.69	+3 +6	38.16	23.24	+5 -1	31.59	21.65	<b>-3 -6</b>
6	48.31	11.90	-3 +7	43.97	19.89	+4 +4	37.94	23.27	+4 -4	31.39	21.51	-5 -3
7	48.21	12.21	-ı +8	43.79	20.07	+5 +1	37.72	23.30	+r -6	31.20	21.37	<b>−</b> 6 ∘
8	48.11	12.52	+1 +8	43.61	20.26	+4 -3	37.51	23.32	<b>−</b> 1 −6	31.01	21.22	-5 + 3
9	48.00	12.83	+3 +6	43.43	20.44	+3 -5	37.29	23.34	<u>-4 -5</u>	30.81	21.06	-3 + 5
10	47.90	13.13	+4 +3	43.25	20.61	0 -6	37.07	23.35	-5 <b>-2</b>	30.63	20.90	-ı +5
II	47.79	13.43	+5 0	43.06	20.78	-2 -5	36.86	23.35	-6 +I	30.44	20.74	+2 +4
12	47.68	13.73	+4 -3	42.87	20.94	<b>-4 -3</b>	36.64	23.35	-4 +4	30.25	20.57	+5 +2
13	47.56	14.02	+2 -5	42.68	21.10	−6 ∘	36.42	23.35	<b>−2</b> +6	30.07	20.39	+6 <b>-</b> 1
14	47.44	14.31	<b>-1</b> -6	42.48	21.25	-5 +3	36.21	23.34	0 +6	29.89	20.21	+6 -4
15	47.32	14.59	-3 -4	42.29	21.40	-4 +5	35.99	23.32	+3 +4	29.71	20.02	+5 -6
16	47.19	14.88	-5 -2	42.09	21.54	—ı +6	35.77	23.30	+5 +2	29.54	19.83	+3 -8
17	47.06	15.15	-6 + 1	41.89	21.68	+1 +6	35.56	23.27	+6 -2	29.36	19.64	+ı <b>-</b> 8
18	46.93	15.43	-5 +4	41.70	21.81	+4 +3	35.34	23.23	+6 -5	29.19	19.44	-I -7
19	46.80	15.70	-3 +6	41.50	21.94	+6 0	35.12	23.19	+5 -7	29.03	19.24	-3 -5
20	46.66	15.97	0 +6	41.29	22.06	+6 -3	34.91	23.15	+3 -8	28.86	19.03	-5 <b>-2</b>
21	46.53	16.23	+3 +5	41.09	22.18	+6 -6	34.69	23.10	∘ −8	28.70	18.82	-5 +1
22	46.38	16.49	+5 +2	40.89	22.29	+4 -8	34.48	23.04	<b>−2 −6</b>	28.54	18.60	-5 ±4
23	46.24	16.75	+6 -1	40.69	22.40	+2 -8	34.27	22.98	-4 -4	28.38	18.38	-4 ±7
24	46.10	17.00	+6 -5	40.48	22.50	-ı -7	34.05	22.91	-5 -I	28.23	18.15	<b>−3</b> +8
25	45.95	17.25	+5 -7	40.27	22.59	<b>−3 −5</b>	33.84	22.84	<b>-5</b> - <b>+2</b>	28.08	17.92	o +9
26	45.80	17.49	+3 -8	40.07	22.68	<b>-4 -3</b>	33.63	22.76	<u>-5</u> +5	27.93	17.69	+2 +8
27	45.64	17.73	+r -8	39.86	22.77	-5 0	33.42	22.67	-3 +8	27.78	17.45	+4 +5
28	45.49	17.97	-2 -7	39.65	22.85	<b>−</b> 5 ±4	33.21	22.58	-2 +9	27.64	17.21	+5 +2
29	45.33	18.20	<u>-4</u> -5	39.44	22.92	-4 +-6	33.01	22.49	+1 +8	27.49	16.97	+5 −1
30	45.17	18.43	-5 -2	39.23	22.99	<b>−3</b> +8	32.80	22.38	+3 +7	27.36	16.72	+3 -4
31	45.01	18.65	-5 +2	39.01	23.05	o +8	32.59	22.27	+4 +4	27.22	16.47	+ı <b>-</b> 6
32	44.84	18.87	<u>-5</u> +5				32.39	22.16	+5 +1	27.09	16.21	<b>-2 -6</b>
<u> </u>		· · · · ·							-			

 $\alpha_{1940,0} = 12^{h} 48^{m} 27.66$   $\delta_{1940,0} = -84^{\circ} 47' 53.05$ 

Obere Kulmination Greenwich

					Sd)	. Octani	tis 5 <sup>m</sup>	38				
m		Septeml	oer		Oktobe	er		Novemb	er	Dezember		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		-	in			in			in		-	in
	12 <sup>h</sup> 48 <sup>m</sup>	84°48′	0,01 0,0	12h48m	84° 47′	0.01 0.01	12 <sup>h</sup> 48 <sup>m</sup>	84° 47′	0.01 0.01	12 <sup>h</sup> 48 <sup>m</sup>	84° 47′	10.0 10.0
1	27.09	16.21	-2 -6	25.00	67.37	-6 +1	27.01	58.05	+1 +6	32.64	52.07	+6 -2
2	26.96	15.95	-4 -4	25.00	67.06	-5 +4	27.14	57.79	+4 +3	32.87	51.95	·+6 -5
3	26.84	15.69	-5 -1	*)25.00	66.74	-3 + 5	27.28	57.53	6 ∘	33.11	51.84	<b>-</b> +5 −8
4	26.72	15.42	-6 +2	25.01	66.42	0 +6	27.42	57.27	<b>+7 −4</b>	33.35	51.74	+3 -9
5	26.61	15.15	-4 +4	25.02	66.11	+3 +4	27.57	57.02	+6 -7	33.59	51.64	0 -9
6	26.49	14.88	<b>−2</b> +5	25.03	65.79	+5 +1	27.72	56.77	+4 -9	33.83	51.54	-2 -7
7	26.39	14.61	+1 +5	25.05	65.47	+6 -2	27.88	56.52	+2 -9	34.07	51.46	-4 -4
8	26.28	14.33	+4 +3	25.07	65.16	+6 -5	28.04	56.28	-r -8	34.31	51.38	-5 -ı
9	26.18	14.05	+6 0	25.10	64.84	+5 -8	28.20	56.04	-3 -6	34.56	51.30	-5 +2
10	26.08	13.77	+7 -3	25.13	64.53	+3 -9	28.37	55.81	<del>-4</del> -3	34.81	51.23	-4 +4
II	25.99	13.48	+6 -6	25.17	64.22	+1 -9	28.54	55.58	<b>−5</b> ∘	35.06	51.17	<b>−3</b> +6
12	25.90	13.19	+4 -8	25.21	63.91	-2 -7	28.71	55.36	-5 +3	35.31	51.12	-ı +7
13	25.81	12.90	+2 -8	25.26	63.59	-3 -5	28.89	55.14	<b>-</b> 4 +5	35.56	51.07	+1 +7
14	25.73	12.61	∘ −8	25.31	63.28	-5 -2	29.07	54.93	-2 +7	35.82	51.03	+3 +5
15	25.65	12.31	<b>−2 −6</b>	25.37	62.98	-5 +I	29.26	54.72	o +7	36.07	50.99	+5 +3
16	25.58	12.02	-4 -3	25.43	62.67	<b>-4</b> +4	29.44	54.51	+2 +7	36.33	50.96	+5 0
17	25.51	11.72	<b>−5</b> ∘	25.50	62.36	-3 +6	29.64	54.31	+3 +5	36.58	50.93	+4 -3
18	25.45	11.42	-5 +3	25.57	62.06	-2 +7	29.83	54.11	+4 +3	36.84	50.91	+2 -5
19	25.39	11.11	<b>−</b> 4 +5	25.64	61.75	0 +8	30.03	53.92	+5 0	37.10	50.90	∘ −5
20	25.33	10.81	<b>−</b> 3 +7	25.72	61.45	+2 +7	30.23	53.74	+4 -3	37.36	50.89	-2 -5
21	25.28	10.50	-r +8	25.80	61.15	+4 +5	30.44	53.56	+2 -5	37.62	50.89	<b>−5 −3</b>
22	25.23	10.19	+r +8	25.89	60.86	+5 +2	30.65	53.39	-r -5	37.88	50.90	<b>−</b> 6 ∘
23	25.19	9.89	+3 +7	25.98	60.56	+4 -I	30.86	53.22	-3 -3	38.14	50.91	<b>−6 +4</b>
24	25.15	9.58	+4 +4.	26.08	60.27	+3 -4	31.07	53.06	-5 -r	38.40	50.93	<del>-4</del> +6
25	25.12	9.26	+5 +1	26.18	59.99	∘ −5	31.29	52.90	-6 +2	38.66	50.96	-2 +7
26	25.09	8.95	+4 -3	26.29	59.70	-2 -5	31.51	52.75	-5 +5	38.92	50.99	+r +6
27	25.06	8.64	+2 -5	26.40	59.42	-5 <b>-</b> 3	31.73	52.60	-3 +7	39.19	51.03	+4 +4
28	25.04	8.32	-r -5	26.51	59.14	-6 0	31.95	52.46	0 +7	39.45	51.08	+6 0
29	25.02	8.01	-3 -4	26.63	58.86	<b>−</b> 6 +3	32.18	52.32	+3 +5	39.71	51.13	+6 -3
30	25.01	7.69	-5 <b>-2</b>	26.75	58.59	-4 +5	32.41	52.19	+5 +2	39.97	51.19	+5 -6
31	25.00	7.37	-6 +I	26.88	58.32	<b>-2</b> +6	32.64	52.07	+6 -2	40.23	51.26	+4 -8
32				27.01	58.05	+1 +6				40.50	51.33	+1 -9

 $\alpha_{1940.0} = 12^h 48^m 27.66$ 

 $\delta_{1940.0} = -84^{\circ} 47' 53.405$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Okt. 3.

Se)	20	G.	Octantis	6 <sup>m</sup> .52
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		Janua	r		Februa	ır		März		April		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		_	in		_	in			in			in
	14 <sup>b</sup> 56 <sup>m</sup>	87° 54′	0.01 0.01	14 <sup>h</sup> 56 <sup>m</sup>	87° 54′	0.01 0.01	14 <sup>h</sup> 57 <sup>m</sup>	87° 54′	10,0	14 <sup>h</sup> 57 <sup>m</sup>	87° 54′	0.01 0.01
1	31.57	9.18	- 8 -6	51.87	7.94	- 4 +5	10.89	11.64	+ 6 +5	27.05	19.59	+17 -3
2	32.17	9.06	-II -3	52.55	8.00	+ 2 +6	11.49	11.84	+12 +4	27.47	19.90	+146
3	32.78	8.94	-11 o	53.23	8.06	+ 8 +5	12.10	12.04	+16 +2	27.87	20.21	+ 9 -7
4	33.39	8.82	-8 + 3	53.91	8.12	+13 +3	12.70	12.25	+17 -1	28.27	20.52	+ 3 -7
5	34.01	8.71	- 3 +6	54.59	8.19	+16 +1	13.29	12.46	+15 -4	28.66	20.83	-3 -6
6	34.63	8.61	+ 4 +6	55.26	8.27	+16 -2	13.88	12.68	+11 -6	29.04	21.15	-8 -5
7	35.26	8.51	+ 9 +5	55.94	8.35	+13 -4	14.47	12.90	+ 6 -7	29.42	21.47	-12 -2
8	35.89	8.42	+14 +3	56.62	8.44	+ 9 -6	15.04	13.13	∘ −7	29.79	21.79	-14 0
9	36.53	8.33	+15 0	57.29	8.53	+ 3 -7	15.62	13.36	- 5 -6	30.14	22.11	-14 +3
10	37.17	8.25	+15 -3	57.96	8.63	- 3 -6	16.18	13.59	-10 <b>-4</b>	30.49	22.43	-11 +6
11	37.81	8.18	+11 <b>-</b> 5	58.63	8.73	-8 - 5	16.74	13.83	-14 -1	30.84	22.75	<b>−</b> 7 +8
12	38.45	8.11	+ 7 -6	59.30	8.84	-12 -3	17.30	14.07	-15 +2	31.17	23.08	- 2 +9
13	39.10	8.05	+ r -7	59.97	8.95	-15 o	17.85	14.31	-14 + 5	31.49	23.41	+ 4 +7
14	39.75	7.99	<b>−</b> 5 −6	60.64	9.07	-16 +3	18.39	14.56	-rr +7	31.81	23.74	+ 8 +5
15	40.41	7.94	-r∘ <b>-</b> 4	61.30	9.19	<b>−14</b> +6	18.93	14.81	- 6 +9	32.12	24.07	+10 +2
16	41.07	7.89	-14 -2	61.96	9.32	<b>−</b> 9 +8	19.46	15.07	0 +9	32.42	24.41	+ 9 -2
17	41.73	7.85	-16 + 1	62.62	9.45	- 4 +9	19.99	15.32	+ 6 +7	32.71	24.74	+ 5 -5
18	42.40	7.82	-15 + 5	63.28	9.59	+ 3 +8	20.51	15.59	+ 9 +4	32.99	25.08	— I —7
19	43.07	7.79	-12 +7	63.93	9.74	+ 8 +6	21.02	15.85	+10 0	33.26	25.42	-7 -6
20	43.74	7.77	<i>−</i> 7 +9	64.58	9.88	+11 +2	21.52	16.12	+ 8 -4	33.53	25.75	-12 <b>-</b> 4
21	44.41	7.75	0 +9	65.23	10.04	+11 -2	22.02	16.39	+ 4 -6	33.78	26.09	-r <sub>4</sub> -r
22	45.08	7.74	+ 6 +7	65.87	10.20	+ 7 -5	22.51	16.67	-3 -7	34.03	26.44	-13 +2
23	45.75	7.73	+11 +4	66.51	10.36	+ 2 -7	23.00	16.95	<b>−</b> 9 <b>−</b> 6	34.26	26.78	-8 + 5
24	46.43	7.73	+12 0	67.15	10.53	- 4 -7	23.48	17.23	-12 -4	34.49	27.12	— т +6
25	47.11	7.74	+10 -4	67.78	10.70	- 9 -6	23.95	17.52	-13 0	34.71	27.46	+ 6 +6
26	47.79	7.75	+ 6 -7	68.41	10.88	-12 -3	24.42	17.81	-10 +3	34.92	27.81	+13 +4
27	48.47	7.77	0 -8	69.04	11.06	-11 +1	24.87	18.10	- 4 -1-5	35.12	28.15	+17 +1
28	49.15	7.79	<b>−</b> 6 <b>−</b> 7	69.66	11.25	<b>−</b> 7 -⊦-4	25.32	18.39	+ 3 +-6	35.31	28.50	+18 <b>-2</b>
29	49.83	7.82	-11 -5	70.27	11.44	— I +5	25.77	18.69	+10 +5	35-49	28.84	+15 -5
30	50.51	7.86	-11 -1	70.89	11.64	+ 6 +5	26.20	18.99	+15 +3	35.67	29.19	+11 -7
31	51.19	7.90	- 9 +2				26.63	19.29	+18 0	35.83	29.53	+ 5 -8
32	51.87	7.94	- 4 +5				27.05	19.59	+17 -3			
	,	,	1 01	0 1			- 0   1	0 1		1	01	

$$\alpha_{1940.0} = 14^{h} 56^{m} 36.85$$

$$\alpha_{1940.0} = 14^{h} \quad 56^{m} \quad 36.85$$
 $\delta_{1940.0} = -87^{\circ} \quad 54^{\circ} \quad 29.74$ 

Obere Kulmination Greenwich

Se)	20	G.	Octantis	6 <sup>m</sup> 52	
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т.		Mai			Juni			Juli			Augus	t
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
			in		-	in		_	in		_	in
	14 <sup>h</sup> 57 <sup>m</sup>	87° 54′	0.01 0.01	14 <sup>h</sup> 57 <sup>m</sup>	87°54′	0.01 0.01	14 <sup>h</sup> 57 <sup>m</sup>	87° 54′	0.01 0.01	14 <sup>h</sup> 56 <sup>m</sup>	87°54′	10.0 10.0
I	35.83	29.53	+ 5 -8	36.12	40.33	-14 +1	27.96	48.46	- 7 +8	73.14	52.82	+10 +4
2	35.99	29.88	- I -7	35.97	40.64	-13 +4	27.57	48.67	- 2 +8	72.59	52.88	+11 0
3	36.13	30.22	- 6 - 6	35.81	40.95	-10 +6	27.17	48.88	+ 4 +7	72.05	52.93	+ 9 -4
4	36.27	30.57	-10 -3	35.65	41.26	- 5 +8	26.76	49.08	+ 9 +5	71.50	52.97	+ 5 -6
5	36.40	30.92	-13 -I	35.48	41.57	+ r +8	26.34	49.28	+12 +2	70.95	53.01	- 2 -7
6	136.51	31.26 31.61	-14 +2 -12 +5	35.30	41.87	+ 6 +7	25.92	49.48	+11 -2	70.40	53.04	- 7 -6
7	36.72	31.96	-8+7	35.10	42.17	+10 +4	25.49	49.67	+ 8 -5	69.85	53.07	-11 -4
8	36.81	32.30	- 3 +8	34.90	42.47	+11 0	25.06	49.86	+ 2 -7	69.30	53.09	I2 I
9	36.89	32.65	+ 2 +8	34.69	42.77	+10 -3	24.62	50.04	- 4 -7	68.75	53.11	-ro +3
10	36.96	33.00	+ 7 +6	34.47	43.06	+ 5 -6	24.18	50.22	- 9 -5	68.19	53.12	- 5 +5
11	37.02	33.34	+10 +3	34.25	43-35	— т — <sub>7</sub>	23.73	50.39	-13 -2	67.64	53.12	+ 2 +6
12	37.08	33.69	+10 -1	34.01	43.64	- 7 -6	23.27	50.56	-12 + 1	67.08	53.12	+ 8 +5
13	37.12	34.03	+ 8 -4	33.76	43.93	-12 -4	22.81	50.72	- 9 + <sub>4</sub>	66.53	53.11	+13 +3
14	37.15	34.37	+ 2 -6	33.51	44.21	-14 -1	22.34	50.88	<b>− 3</b> +6	65.97	53.09	+16 0
15	37.17	34.71	- 4 -6	33.25	44.49	-12 +3	21.87	51.03	+ 3 +6	65.41	53.07	+16 -3
16	37.19	35.06	-ro -5	32.98	44.76	- 8 + <sub>5</sub>	21.39	51.18	+10 +5	64.86	53.05	+13 -5
17	37.19	35.40	-r3 -2	32.70	45.03	<b>–</b> 1 +6	20.90	51.32	+14 +3	64.30	53.02	+ 8 -7
18	37.18	35.73	-14 + 1	32.41	45.30	+ 6 +6	20.42	51.46	+16 o	63.74	52.98	+ 3 -7
19	37.17	36.07	-rr +4	32.12	45.57	+12 +4	19.92	51.59	+15 -3	63.19	52.94	-3 -7
20	37.15	36.41	<b>-</b> 5 +6 1	31.81	45.83	+16 +1	19.42	51.72	+11 -6	62.63	52.89	-8 -5
21	37.11	36.74	+ 2 +7	31.50	46.09	<b>⊣</b> 16 <b>−</b> 2	18.92	51.84	+ 6 -7	62.08	52.83	-12 -2
22	37.07	37.08	+ 9 +5	31.18	46.34	+14 -5	18.41	51.96	0 -7	61.53	52.77	-14 + 1
23	37.02	37.41	+14 +3	30.85	46.59	+10 -7	17.90	52.07	-5 -6	60.97	52.70	-14 +4
24	36.96	37.74	+17 0	30.52	46.84	+ 4 -8	17.38	52.18	-10 -4	60.43	52.63	<b>−12</b> +6
25	36.88	38.07	+17 -3	30.18	47.08	- 2 -7	16.87	52.28	-13 -I	59.88	52.55	<b>−</b> 7 +8
26	36.80	38.40	+r3 <b>−</b> 6	29.83	47.32	- 7 -6	16.34	52.37	-15 +2	59.34	52.47	- 2 +9
27	36.71	38.72	+ 8 -7	29.47	47.56	-12 -3	15.82	52.46	-13 +5	58.80	52.38	+ 4 +8
28	36.61	39.05	+ 2 -8	29.10	47.79	-14 o	15.29	52.55	-10 +7	58.26	52.28	+8+5
29	36.50	39.37	- 4 -7	28.73	48.02	-14 +3	14.76	52.62	<b>−</b> 5 +8	57.72	52.18	+11 +2
30	36.38	.39.69	- 9 -5	28.35	48.24	-12 +6	14.22	52.70	+ 1 +8	57.19	52.07	+10 -2
31	36.25	40.01	-13 -2	27.96	48.46	- 7 +8	13.68	52.76	+ 7 +7	56.66	51.96	+ 6 -5
32	36.12	40.33	-14 +I				13.14	52.82	+10 +4	56.13	51.84	·+ I —7
			0				2	s 1				

 $\alpha_{1940.0} = 14h 56^m 36.85$ 

 $\delta_{1940.0} = -87^{\circ} 54' 29''74$ 

Se)	20	G.	Octantis	6 52
~0,	20	<b>U</b> •	Comming	0 - 72

m.		Septemb	oer	Oktober				Noveml	er	186	Dezemb	er
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
			in			in		_	in		_	in
	14 <sup>h</sup> 56 <sup>m</sup>	87° 54′	0.01 0.01	14 <sup>h</sup> 56 <sup>m</sup>	87° 54′	10.01	14 <sup>h</sup> 56 <sup>m</sup>	87° 54′	0.01 0.01	14 <sup>h</sup> 56 <sup>m</sup>	87° 54′	0.01 0.01
I	56.13	51.84	+ 1 -7	42.94	45.95	-r3 -3	37.74	36.63	- r +6	43.21	27.54	+14 +2
2	55.61	51.72	<b>−</b> 6 <b>−</b> <sub>7</sub>	42.61	45.69	<b>-14</b> 0	37.76	36.31	+ 6 +6	43.56	27.27	+17 -1
3	55.09	51.59	-II -5	42.30	45.42	-11 + 3	37.78	35.99	+13 +4	43.93	27.01	+17 -4
4	54.58	51.45	-I3 -2	41.99	45.15	- 5 +5	37.82	35.67	+17 +1	44.30	26.75	+13 -7
5	54.07	51.31	—I2 +I	41.70	44.88	+ 3 +6	*)37.87	35-35	+18 -3	44.69	26.50	+ 7 -8
6	53.57	51.17	- 8 +4	41.41	44.60	+10 +5	37.93	35.03	+16 -6	45.08	26.24	+ r -8
7	53.07	51.02	- I +6	41.14	44.32	+16 +2	38.00	34.71	+11 -8	45.48	26.00	- 5 <b>-</b> 7
8	52.57	50.86	+ 6 +6	40.87	44.04	+18 -1	38.09	34.39	+ 4 -8	45.90	25.75	-9 - 5
9	52.08	50.70	+13 +4	40.62	43.75	+17 -4	38.18	34.07	- I -8	46.32	25.51	-12 -2
10	51.59	50.54	+16 +1	40.37	43.46	+13 -6	38.29	33.75	<b>−</b> 6 <b>−</b> 6	46.75	25.28	-I2 +2
II	51.11	50.37	+17 -2	40.13	43.17	+8-8	38.41	33.43	<b>-</b> ro −3	47.20	25.05	-10 +4
12	50.64	50.19	+15 -5	39.91	42.87	+ 2 -8	38.54	33.12	<b>-12</b> 0	47.65	24.82	-7 + 6
13	50.17	50.01	+11 -7	39.70	42.57	- 4 -7	38.69	32.81	-123	48.10	24.60	- 3 ±7
14	49.71	49.83	+ 5 -7	39.49	42.27	- 8 -5	38.84	32.50	<b>−1</b> 0 +5	48.57	24.38	+ 2 +7
15	49.26	49.63	— I −7	39.30	41.97	-12 -2	39.01	32.19	<b>−</b> 6 +7	49.05	24.17	+ 7 +6
16	48.81	49.44	- 6 -6	39.12	41.67	-13 +1	39.19	31.88	- I +8	49.53	23.96	+10 +3
17	48.36	49.24	-10 -4	38.95	41.37	-I2 +4	39.38	31.57	+ 3 +7	50.02	23.76	+11 0
18	47.93	49.03	-13 -I	38.79	41.06	-10 +6	39.58	31.27	+ 7 +5	50.52	23.56	+8 -3
19	47.50	48.82	-I4 +2	38.64	40.75	- 5 +8	39.79	30.97	+10 +3	51.03	23.36	+ 4 -5
20	47.07	48.60	-12 +5	38.50	40.44	o +8	40.02	30.67	+10 -1	51.55	23.17	<b>–</b> 2 –6
21	46.65	48.38	- 9 +7	38.37	40.13	+ 5 +7	40.25	30.37	+ 7 -4	52.07	22.99	- 8 5
22	46.24	48.16	<b>−</b> 4 +8	38.26	39.81	+ 8 +5	40.50	30.07	+ 2 -6	52.61	22.81	-13 -3
23	45.84	47.93	+ 1 +8	38.15	39.50	+ 9 +2	40.76	29.78	<b>-</b> 5 <b>-</b> 6	53.15	22.63	-15 0
24	45.45	47.70	+ 6 +7	38.06	39.19	+ 8 -2	41.03	29.49	-11 -5	53.69	22.46	-13 +3
25	45.07	47.46	+ 9 +4	37.98	38.87	+ 4 -5	41.31	29.20	-14 -2	54.24	22.30	- 9 + <sub>5</sub>
26	44.69	47.22	+10 0	37.91	38.55	- 2 -6	41.60	28.92	-15 +1	54.80	22.14	- 2 +7
27	44.32	46.97	+ 7 -4	37.85	38.23	<b>−</b> 8 <b>−</b> 6	41.90	28.64	-12 +4	55-37	21.98	+ 6 +6
28	43.96	46.72	+ 2 -6	37.81	37.91	-13 -4	42.21	28.36	-6 +6	55-94	21.83	+12 +4
29	43.61	46.47	- 4 -6	37.77	37.59	-15 -1	42.53	28.08	+ 2 +7	56.52	21.69	+16 +1
30	43.27	46.21	- 9 <b>-</b> 5	37.75	37.27	-14 +2	42.86	27.81	+ 9 +6	57.11	21.55	+16 -2
31	42.94	45.95	-r3 -3	37.74	36.95	- 9 + <del>5</del>	43.21	27.54	+14 +2	57.70	21.42	+14 -5
32				37.74	36.63	<b>–</b> 1 +6				58.29	21.29	+ 9 -7

$$\delta_{1940.0} = -87^{\circ} 54' 29.74$$

 $<sup>\</sup>alpha_{1940.0} = 14^{h} 56^{m} 36.85$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Nov. 5.

Obere Kulmination Greenwich

St)	26	G.	Octantis	6 <sup>m</sup> 13
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m	3000	Janua	r	30.0	Februa	ar	11	März		April		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		_	in		_	in		_	in			in
	16 <sup>h</sup> 37 <sup>m</sup>	86° 15′	0.01 0.01	16 <sup>h</sup> 38 <sup>m</sup>	86° 15′	0.01 0.01	16 <sup>h</sup> 38 <sup>m</sup>	86° 15′	0.01 0.01	16 <sup>h</sup> 38 <sup>m</sup>	86° 15′	0.01 0.01
I	55.38	29.89	- 2 -7	5.21	24.22	- 4 +4	16.53	23.21	+ 1 +7	28.25	26.67	+11 +1
2	55.63	29.64	- 5 -5	5.58	24.11	<b>- 2</b> +6	16.92	23.25	5 +-6	28.60	26.85	+10 -2
3	55.89	29.40	- 6 <b>-</b> 2	5.95	24.01	+ 2 +7	17.32	23.30	+ 8 +5	28.94	27.04	+8 -5
4	56.15	29.16	<b>-</b> 6 <b>- -2</b>	6.33	23.91	+ 5 +6	17.71	23.35	+10 +2	29.28	27.23	+5 -6
5	56.42	28.92	- 4 + <sub>5</sub>	6.71	23.82	+ 8 +4	18.11	23.41	+10 0	29.62	27.42	+ 1 -7
6	56.69	28.68	- 1 +7	7.08	23.73	+ 9 +2	18.50	23.47	+ 9 -3	29.95	27.62	- 2 -6
7	56.97	28.45	+ 3 +7	7.47	23.65	+ 9 -1	18.90	23.54	+ 6 −5	30.29	27.82	-6 -5
8	57.26	28.23	+ 6 +6	7.85	23.58	+ 8 −4	19.29	23.61	+ 3 -6	30.61	28.02	-8 -2
9	57.54	28.01	+ 8 +3	8.23	23.51	-l- 5 —6	19.68	23.69	∘ −7	30.94	28.23	- 9 o
10	57.84	27.79	+ 9 +1	8.62	23.44	+ 1 -7	20.07	23.77	<b>−</b> 4 −6	31.26	28.44	- 9 +3
II	58.13	27.58	+ 8 -2	9.01	23.38	<b>− 2 −6</b>	20.46	23.86	-7-4	31.58	28.65	<b>-8</b> +6
12	58.43	27.38	+ 6 -5	9.39	23.33	<b>−</b> 5 <b>−</b> 5	20.85	23.95	- 9 -I	31.89	28.87	<b>- 5</b> +8
13	58.74	27.18	+ 4 -6	9.79	23.28	-8 -3	21.24	24.04	-IO +2	32.20	29.09	- r +8
14	59.05	26.98	∘ −7	10.18	23.23	-10 o	21.62	24.14	- 9 +5	32.51	29.31	+ 2 + 6
15	59.36	26.79	<b>-</b> 46	10.57	23.19	-10 +3	22.01	24.24	- 7 +7	32.82	29.54	+ 5 +4
16	59.68	26.60	<b>−</b> 7 <b>−</b> 5	10.97	23.16	<b>−</b> 9 +6	22.39	24.35	- 4 +8	33.12	29.77	+6 0
17	60.00	26.42	-IO -2	11.36	23.13	<b>− 6 +8</b>	22.78	24.46	0 +8	33.42	30.00	+ 5 -4
18	60.32	26.24	-11 +1	11.76	23.10	<b>− 2</b> +8	23.15	24.58	+ 3 +6	33.71	30.24	+ 36
19	60.65	26.07	-10 +5	12.16	23.09	+ 2 +7	23.53	24.70	+ 5 +2	34.00	30.48	- 1 −7
20	60.98	25.90	- 8 + <sub>7</sub>	12.55	23.07	+ 5 +4	23.91	24.83	+ 6 -2	34.28	30.72	- 4 -7
21	61.32	25.73	- 4 +8	12.95	23.06	+7 0	24.28	24.96	+ 5 -5	34.56	30.97	- 7 -4
22	61.65	25.57	0 +8	13.35	23.06	+ 6 -4	24.65	25.09	+ 2 -7	34.84	31.22	- 8 <b>-</b> -1
23	62.00	25.41	+ 4 +6	13.74	23.06	+4 -6	25.03	25.23	- 2 −8	35.11	31.47	-6 + 3
24	62.34	25.26	+ 7 +2	14.14	23.07	+ r -8	25.39	25.37	-5 -6	35.38	31.72	-3 + 5
25	62.69	25.11	+ 7 -2	14.54	23.08	<b>− 3 −7</b>	25.76	25.52	<b>−</b> 7 <b>−</b> 3	35.64	31.98	+ 1 +7
26	63.04	24.97	+ 6 -5	14.94	23.10	- 5 -5	26.12	25.67	→ 6 +1	35.90	32.24	+ 5 +7
27	63.40	24.83	+ 3 -8	15.33	23.12	— 6 — <b>г</b>	26.49	25.83	- 4 +4	36.16	32.50	+8+5
28	63.75	24.70	o —8	15.73	23.14	- 5 +2	26.84	25.99	- I +6	36.41	32.76	+11 +2
29	64.11	24.57	<b>−</b> 4 −6	16.13	23.17	<b></b> 3 <b>-</b> -5	27.20	26.15	+ 3 +7	36.66	33.03	+11 -1
30	64.48	24.45	- 6 -4	16.53	23.21	+ 1 +7	27.55	26.32	+ 7 +6	36.90	33.30	+ 9 -4
31	64.84	24.33	- 6 o	11 1	02 10		27.90	26.49	+10 +3	37.14	33-57	+ 6 -6
32	65.21	24.22	<b>-</b> 4 +4				28.25	26.67	+11 + 1		0 3	

 $\alpha_{1940.0} = 16^{h} 38^{m} 6.82$ 

 $\delta_{1940.0} = -86^{\circ} \text{ 15}' \text{ 47}'' \circ 7$ 

Obere Kulmination Greenwich

St) 26 G. Octantis	6 <sup>m</sup> 13
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	1			1		o d. Ott	1	7.13		1		
Tag	11.10	Mai			Juni		111-1	Juli		1000	Augus	t
8	AR.	Dekl.	© Glieder	AR.	Deki.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		-	in		_	in		_	in		-	in
	16 <sup>h</sup> 38 <sup>m</sup>	86° 15′	0.01 0.01	16 <sup>h</sup> 38 <sup>m</sup>	86° 15′	0.01 0.01	16 <sup>h</sup> 38 <sup>m</sup>	86° 15′	0.01 0.01	16 <sup>h</sup> 38 <sup>m</sup>	86° 15′	10.01
I	37.14	33.57	+ 6 -6	{ 42.11 42.18	42.88 43.19	$-6 -4 \\ -8 -2$	41.81	52-37	<b>-8</b> +6	36.43	59.69	+ 4 +5
2	37.37	33.85	+ 3 -7	42.25	43.51	-9 + 1	41.71	52.65	- 5 +7	36.19	59.87	+ 6 +2
3	37.60	34.13	- 1 -7	42.31	43.83	- 8 +4	41.60	52.93	— r →8	35.94	60.04	+7 - 2
4	37.83	34.41	- 4 - <sub>5</sub>	42.37	44.14	- 6 -1-6	41.49	53.21	+ 3 +7	35.69	60.20	+ 5 -5
5	38.05	34.69	<b>−</b> 7 <b>−</b> 3	42.43	44.46	— 3 <sup>⊣</sup> -7	41.38	53.48	+ 5 +4	35-43	60.36	+ 3 -7
6	38.27	34.98	- 8 <b>-</b> 1	42.47	44.77	o +7	41.26	53.75	+7 0	35.17	60.52	— 1 —8
7	38.48	35.26	- 9 +2	42.51	45.09	+ 4 -1-5	41.13	54.02	+ 7 -3	34.91	60.67	-4 -6
8	38.69	35.55	- 8 + <sub>5</sub>	42.55	45.40	+ 6 +2	41.00	54.29	+ 4 -6	34.65	60.81	-6 -3
9	38.89	35.84	- 5 +7	42.58	45.72	+ 7 -1	40.87	54-55	+ I -7	34.38	60.95	<b>−7</b> °
10	39.09	36.13	- 2 +8	42.60	46.03	+ 6 -4	40.73	54.82	- 3 -7	34.11	61.09	- 5 +4
II	39.28	36.43	+ 1 +7	42.62	46.35	+ 3 -7	40.58	55.07	<b>− 6 −5</b>	33.83	61.22	- 2 +6
12	39.46	36.72	+ 4 +5	42.63	46.66	— ı — <sub>7</sub>	40.43	55.33	<b>−</b> 7 <b>−</b> 2	33.55	61.34	+ 2 +7
13	39.64	37.02	+ 6 +1	42.64	46.97	- 4 -6	40.27	55.58	- 7 +2	33.27	61.46	+ 6 +6
14	39.82	37.32	+ 6 -2	42.64	47.28	-7 - 3	40.11	55.83	- 4 +5	32.99	61.58	+ 8 +4
15	39.99	37.62	+ 4 -5	42.64	47.59	<b>−8</b> ∘	39.94	56.08	— ı - <del>-</del> -7	32.71	61.69	+10 +1
16	40.16	37.92	+ r -7	42.63	47.90	<b>-</b> 6 +3	39.77	56.32	+ 3 +7	32.42	61.79	+ 9 -2
17	40.32	38.22	- 3 -7	42.61	48.21	<b>−</b> 3 +-6	39.59	56.56	+ 6 +5	32.13	61.89	+ 8 -4
18	40.48	38.53	<b>-</b> 6 −5	42.59	48.52	0 +7	39.41	56.79	+ 9 +3	31.84	61.99	+ 5 -6
19	40.63	38.83	<b>−8 −2</b>	42.57	48.82	+ 4 +6	39.23	57.03	+10 0	31.54	62.08	+ r -7
20	40.78	39.14	- 7 +I	42.53	49.12	+ 8 +5	39.04	57.25	+ 9 -3	31.24	62.16	<b>− 2</b> −6
21	40.92	39.44	- 5 +5	42.49	49.43	+10 +2	38.85	57.48	+ 7 -5	30.94	62.24	<b>−</b> 5 <b>−</b> 5
22	41.05	39.75	- 2 +7	42.45	49.73	+10 -I	38.65	57.70	+ 3 -7	30.64	62.31	-8 - 2
23	41.18	40.06	+ 2 +7	42.40	50.03	+8-4	38.45	57.92	∘ −7	30.33	62.38	- 9 +ı
24	41.31	40.37	+ 6 +6	42.34	50.33	+ 6 -6	38.24	58.13	<b>-</b> 4 -6	30.03	62.44	-9 + 3
25	41.43	40.68	+ 9 +3	42.28	50.63	+ 2 -7	38.03	58.34	- 7 -4	29.72	62.50	<b>-8</b> +6
26	41.55	41.00	+10 0	42.22	50.92	- 2 <del>-</del> 7	37.81	58.55	- 9 -r	29.41	62.55	<b>−</b> 5 +8
27	41.65	41.31	+10 -3	42.14	51.21	<b>− 5 −5</b>	37.59	58.75	<b>-9</b> +2	29.11	62.59	<b>- 2</b> +8
28	41.76	41.62	+ 8 -5	42.07	51.50	-8 -3	37.37	58.95	- 9 +5	28.80	62.63	+ 2 +7
29	41.85	41.94	+ 4 -7	41.99	51.79	<b>−9</b> ∘	37.14	59.14	- 6 + <sub>7</sub>	28.48	62.66	+ 5 +4
30	41.94	42.25	+ 1 -7	41.90	52.08	<b>-</b> 9 <b>+</b> 3	36.91	59.33	<b>− 3</b> +8	28.17	62.69	+6 0
31	42.03	42.56	- 3 -6	41.81	52.37	<b>-</b> 8 +6	36.67	59.51	0 +8	27.86	62.71	+ 6 -3
32	42.II   42.I8	42.88 43.19	$\begin{bmatrix} -6 & -4 \\ -8 & -2 \end{bmatrix}$				36.43		+ 4 +5	27.55	62.73	+ 3 -6
			0			1					0   1	

 $\alpha_{1940.0} = 16^{h} 38^{m} 6.82$ 

 $\delta_{1940.0} = -86^{\circ} 15' 47.07$ 

#### Obere Kulmination Greenwich

St) 26 G. Octantis 6m13 September Oktober November Dezember Tag AR. Dekl. C Glieder Dekl. © Glieder AR. Dekl. C Glieder AR. Dekl. C Glieder AR. in in in in o.o1 | o.o1 | 16h 38m | 86° 15' 0.01 0.01 16h 38m 86° 15' 16h 38m 86° 15' 16h 38m 86° 16' 0.01 0,01 0.01 0.01 2.73 18.38 60.49 -6 -610.59 44.05 27.55 +3 -611.73 53.38 -3 + 6+7 +5 I 0 -8 18.10 10.66 43.74 2 27.23 2.74 60.33 -7 - 311.60 53.10 + 1 + 8+10 +360.17 26.92 2.74 -3 - 717.83 -7 + 111.48 52.81 + 5 +6 10.73 43.42 +113 26.60 2.74 17.56 60.00 -5 + 411.36 10.81 43.II +10 -4 -6 - 552.51 +9 + 44 5 26.20 2.73 -7 - 117.29 59.82 -1 +611.24 52.22 +11 +110.80 42.79 +8 -66 59.64 10.98 +4 - 825.97 2.71 -6 + 217.03 +3 + 711.14 51.92 +11 -242.48 51.62 0 -7 7 25.66 2.69 -3 + 516.77 59.45 11.03 +9 -511.08 42.17 + 7 +5 59.26 8 2.67 16.51 OI.II 41.86 -3 -625.34 + 1 + 7+10 +310.94 51.32 +6 - 716.26 59.06 -6 - 49 25.03 2.64 + 5 +6 +11 o 10.85 51.01 +3 -711.30 41.55 24.71 2.60 +8+4 16.01 58.86 11.42 41.24 -7 - 110 +10 -310.77 50.70 - I -7 58.65 +8-5 10.60 -8 + 224.39 2.56 +10 +215.77 50.39 -4 - 511.55 40.94 II 12 24.08 2.51 +10 -115.53 58.44 + 5 -7 10.62 50.08 -7 - 311.68 40.64 -7 + 4**-** 8 11.82 13 23.77 2.45 + 9 -4 15.29 58.23 + 1 -710.56 49.77 40.34 -5 + 623.45 2.39 +6 -615.06 58.01 -2 -610.51 49.46 -8 + 311.97 40.04 - 2 +7 14 + 3 -7 -5 - 410.46 49.15 12.12 15 23.14 2.33 14.83 57.79 -7 + 539.74 -I- I +7 16 22.83 2.26 -1 -714.61 57.56 **−** 7 **−**2 48.83 10.42 -4 + 712.27 + 4 +5 39.44 -8 + 122.52 2.18 - 4 -5 14.39 57.32 10.38 48.51 + 6 +2 17 - I +7 12.44 39.15 18 22.21 2.10 -7 - 314.18 57.00 -8 + 448.20 12.61 38.86 + 6 - 110.35 +2 +6-8 - 110 21.00 2.01 13.97 56.85 -7 + 610.33 47.88 + 4 +4 12.78 38.57 + 5 -4 20 21.60 IQI 56.60 47.56 12.96 38.28 +2 -6- 9 +2 13.76 - 4 +7 10.31 + 5 +I 21 21.30 1.81 -8 + 513.56 56.35 — I +8 10.31 47.24 + 5 -2 13.15 38.00 -2 -7-6 + 756.10 +2 +6-5 -622 21.00 1.70 13.37 10.30 46.03 + 3 -5 13.34 37.72 -8 - 320.70 -3 + 855.84 10.31 46.61 0 -7 23 1.59 13.18 +4 + 313.54 37.44 46.29 0 +7 55.58 37.17 **-8** o 24 20.40 1.47 13.00 + 5 0 10.32 -4 - 713.75 12.82 13.96 36.90 -7 + 320.11 1.34 55.32 +4 -345.97 -7 - 525 +3 + 510.34 26 19.81 + 5 +2 12.65 55.05 -1-2 --6 10.36 45.65 -9 - 214.17 36.63 - 4 +6 1.22 36.37 27 19.52 1.08 + 5 -2 12.48 54.78 - 2 -7 10.40 45.33 -8 + 214.40 0 +7 28 +5 + 619.23 54.51 -5 -610.43 45.01 -6 + 514.63 36.11 0.94 + 4 -5 12.32 18.95 0.80 44.69 - 2 +7 14.86 +8 +4 29 + I - 712.16 54.23 -8 - 410.48 35.85 0.65 18.66 -8 - 135.60 +10 +1 30 -3 - 712.01 53.95 \*)10.53 44.37 + 3 +7 15.10 18.38 -6 -611.87 +10 -231 0.49 53.67 -7 + 310.50 44.05 -- 7 +5 15.34 35.35 35.11 +8 - 5

-3 + 6

 $\alpha_{1940.0} = 16^{\text{h}} 38^{\text{m}} 6.82$ 

11.73

53.38

32

 $\delta_{1940.0} = -86^{\circ} 15' 47''07$ 

15.59

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Nov. 30.

Obere Kulmination Greenwich

Sg)	χ	Octantis	5 <sup>m</sup> 22

m	0.0730	Janua	r	==(=	Februa	ar	puli	März		April		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
1		-=-	in		_	in		_	in	( ) ( )		in
	18 <sup>h</sup> 19 <sup>m</sup>	87° 39′	10.01	18 <sup>h</sup> 19 <sup>m</sup>	87° 39′	10.01	18 <sub>p</sub> 19 <sub>m</sub>	87° 39′	0.01 0.01	18 <sup>h</sup> 20 <sup>m</sup>	87° 39′	0.01 0.01
1	23.68	17.99	+ 2 -8	33.59	8.80	- 9 +2	48.98	3.20	- 3 +7	8.20	1.49	+14 +4
2	23.86	17.67	- 4 - <sub>7</sub>	34.04	8.55	-6 + 5	49.58	3.08	+ 3 +8	8.82	1.51	+15 +1
3	24.05	17.34	- 8 -4	34.50	8.30	- I +7	50.18	2.95	+ 8 +8	9.44	1.54	+14 -2
4	24.25	17.01	-10 o	34.97	8.06	+ 4 +8	50.78	2.83	+12 +6	10.06	1.57	+11 -4
5	24.46	16.69	- 9 +3	35.44	7.82	+ 9 +7	51.39	2.72	+14 +3	10.68	1.61	+ 6 -6
6	24.68	16.37	- 5 +6	35.92	7.58	+12 +5	52.00	2.61	+14 0	11.29	1.65	+ 1 -7
7	24.92	16.05	0 +8	36.41	7.35	+13 +2	52.61	2.51	12 -3	11.91	1.69	-5 -6
8	25.16	15.73	+ 5 +8	36.90	7.12	+13 -1	53.22	2.41	+8 -5	12.52	1.74	-10 -5
9	25.41	15.41	+ 9 +6	37.39	6.90	+10 -4	53.83	2.31	+ 4 -6	13.13	1.79	-13 -3
10	25.67	15.10	+12 +4	37.89	6.68	+ 6 -6	54.45	2.23	- 2 -7	13.74	1.85	-15 0
11	25.93	14.78	+13 +1	38.40	6.47	+1-7	55.06	2.14	- 7 -6	14.34	1.92	-14 + 3
12	26.21	14.47	+12 -2	38.91	6.26	- 4 -7	55.68	2.06	-12 -5	14.95	1.98	-12 +5
13	26.50	14.16	+ 9 -4	39.43	6.05	<b>−1</b> 0 <b>−6</b>	56.30	1.99	-I5 -2	15.55	2.05	- 7 +7
14	26.80	13.86	+ 4 -6	39.96	5.85	-I4 -4	56.93	1.92	-16 +t	16.15	2.13	- I +7
15	27.10	13.55	- I -7	40.49	5.65	-17 -1	57.55	1.86	-15 +4	16.75	2.21	+ 4 +5
16	27.42	13.25	-7-7	41.03	5.46	-16 +2	58.18	1.80	-rr +6	17.34	2.30	+8+2
17	27.74	12.95	-12 -5	41.57	5.27	-r4 +5	58.80	1.74	- 5 +7	17.93	2.39	+10 -2
18	28.07	12.65	-16 -3	42.12	5.08	- 8 + <sub>7</sub>	59.43	1.69	+ 1 +6	18.52	2.49	+8 -5
19	28.42	12.36	-17 +1	42.67	4.90	<b>-2</b> +7	60.05	1.65	+ 7 +4	19.10	2.59	+ 4 -7
20	28.77	12.07	-15 +4	43.22	4.72	+ 4 +6	60.68	1.61	+10 0	19.68	2.69	- 2 -8
21	29.12	11.78	-11 +6	43.78	4.55	+ 9 +3	61.31	1.57	+10 -3	20.26	2.80	- 7 -6
22	29.49	11.49	- 5 +7	44.34	4.38	+11 -1	61.94	1.54	+ 7 -6	20.83	2.91	<b>-1</b> ○ <b>-3</b>
23	29.87	11.21	+ 2 +7	44.91	4.22	+10 -5	62.56	1.52	+ 2 -8	21.40	3.03	-11 + 1
24	30.25	10.93	+ 8 +4	45.48	4.06	+7-7	63.19	1.50	- 3 -7	21.97	3.15	- 8 +4
25	30.64	10.65	+12 +1	46.06	3.91	+ 1 -8	63.82	1.48	<b>−</b> 7 −5	22.53	3.28	- 3 + <sub>7</sub>
26	31.04	10.38	+12 -3	46.63	3.76	- 4 -6	64.45	1.47	-10 -1	23.09	3.41	+ 3 +8
27	31.45	10.10	+10 -6	47.22	3.61	-8 -3	65.08	1.46	- 9 +2	23.64	3.54	+ 9 +8
28	31.86	9.84	+ 5 -8	47.80	3.47	<b>−</b> 9 ∘	65.70	1.45	- 5 +6	24.19	3.68	+13 +5
29	32.28	9.57	- I -7	48.39	3.34	<b>−</b> 7 +4	66.33	1.45	0 +8	24.73	3.82	+16 +3
30	32.71	9.31	- 6 <b>-</b> 5	48.98	3.20	- 3 +7	66.95	1.46	+ 6 +8	25.27	3.97	+15 0
31	33.15	9.05	- 9 -2				67.58	1.47	+11 +7	25.80	4.12	+13 -3
32	33.59	8.80	- 9 +2				68.20	1.49	+14 +4			

 $\alpha_{1940.0} = 18^{\text{h}} \ 19^{\text{m}} \ 52.45$   $\delta_{1940.0} = -87^{\circ} \ 39' \ 28.758$ 

## Obere Kulmination Greenwich Sal v Octantis 5m22

P13	100	Mai			Juni			Juli	Juli			August		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder		
			in			in		_	in		_	in		
	18h 20m	87° 39′	10,01	18 <sup>h</sup> 20 <sup>m</sup>	87° 39′	0.01 0.01	18 <sup>h</sup> 20 <sup>m</sup>	87° 39′	0.01 0.01	18 <sup>h</sup> 20 <sup>m</sup>	87° 39′	0.01 0.01		
I	25.80	4.12	+13 -3	39.49	10.64	- 6 -6	45.76	19.55	-14 +3	43.21	28.61	+ 2 +6		
2	26.33	4.28	+ 8 -5	39.82	10.90	-10 -5	45.82	19.85	-rr +5	42.98	28.87	+8+4		
3	26.86	4.44	+ 3 -7	40.14	11.16	-13 -2	45.87	20.15	- 6 + <del>7</del>	42.75	29.14	+11 0		
4	27.38	4.60	- 2 -7	40.45	11.43	-14 +t	45.90	20.46	- I +7	42.50	29.39	+11 -3		
5	27.89	4.77	<b>−8 −6</b>	40.76	11.69	-13 +4	45.93	20.76	+ 5 +5	42.25	29.65	+8 -6		
6	28.40	4.94	-12 -4	41.06	11.97	- 9 +6	45.95	21.07	+10 +3	41.99	29.90	+ 3 -7		
7	28.90	5.12	-14 -1	41.35	12.24	- 4 + <sub>7</sub>	45.96	21.37	+11 -1	41.72	30.15	- 2 -7		
8	29.40	5.30	-I4 +2	41.63	12.51	+ 2 +6	45-97	21.67	+10 -4	41.44	30.40	- 7 -5		
9	29.89	5.48	-I2 +4	41.90	12.79	+ 7 +4	45.96	21.97	+6 -7	41.16	30.65	-Io -2		
10	30.38	5.67	- 8 +6	42.17	13.07	+10 +1	45.94	22.28	+ I -8	40.86	30.89	- 9 +2		
11	30.86	5.86	- 2 + <sub>7</sub>	42.42	13.34	-+II -2	45.91	22.58	- 5 -7	40.56	31.13	- 6 + <sub>5</sub>		
12	31.34	6.05	+ 3 +6	42.67	13.63	+ 8 -5	45.88	22.88	- 9 -4	40.25	31.36	- I +7		
13	31.81	6.25	+ 8 +3	42.91	13.91	+ 3 -7	45.83	23.18	—II o	39.93	31.60	+ 4 +8		
14	32.28	6.45	+10 0	43.14	14.20	<b>−</b> 3 <b>−</b> 7	45.78	23.48	-9 + 3	39.61	31.82	+9+7		
15	32.74	6.65	+ 9 -3	43.36	14.49	- 8 -6	45.71	23.78	- 6 +-6	39-27	32.05	+13 +4		
16	33.19	6.86	+ 6 -6	43.58	14.77	-II -3	45.64	24.07	○ +8	38.93	32.27	+14 +1		
17	33.64	7.07	+ I —8	43.78	15.06	-11 + 1	45.55	24.37	+ 6 +7	38.59	32.49	+13 -2		
18	34.08	7.29	<b>−</b> 5 <b>−</b> 7	43.98	15.36	- 8 +4	45.46	24.66	+11 +6	38.23	32.70	+11 -4		
19	34-51	7.51	-9 - 5	44.17	15.65	- 4 +7	45.36	24.96	+13 +3	37.87	32,91	+6 -6		
20	34.93	7.73	-12 <b>-</b> I	44.34	15.94	+ 2 +8	45.25	25.25	-14 0	37.50	33.12	+ 1 -7		
21	35-35	7.95	-10 +3	44.51	16.24	+ 8 +7	45.13	25.54	+13 -3	37.12	33.32	- 5 -6		
22	35.77	8.18	-6 +6	44.67	16.53	+12 +5	45.00	25.83	+ 9 -5	36.74	33.52	-10 -5		
23	36.17	8.41	- r +8	44.82	16.83	+15 +2	44.86	26.12	+ 4 -7	36.35	33.71	-13 -3		
24	36.57	8.65	+ 5 +8	44.96	17.13	+14 -1	44.71	26.40	— ı — <sub>7</sub>	35.95	33.89	-15 0		
25	36.96	8.89	+11 +6	45.09	17.43	+12 -4	44.56	26.68	- 7 -6	35.55	34.08	-15 +3		
26	37-34	9.13	+14 +4	45.22	17.73	+ 7 -6	44.39	26.96	-12 <b>-</b> 4	35.14	34.26	-12 +5		
27	37.72	9.37	+16 +t	45.33 45.43	18.03	+ 2 -71	44.22	27.24	-15 -2	34.73	34-43	-7+7		
28	38.09	9.62	+14 -2	45.53	18.64	- 9 -5	44.04	27.52	-15 + 1	34.31	34.60	- 1 +7		
29	38.45	9.87	+11 <b>−</b> 5	45.62	18.94	-13 -3	43.84	27.80	-14 +4	33.89	34.76	+ 4 +5		
30	38.80	10.12	+ 6 -7	45.69	19.24	-15 0	43.64	28.07	<b>-</b> 1○ +6	33.46	34.92	+8+2		
31	39.15	10.38	o <b>-</b> 7	45.76	19.55	-14 +3	43.43	28.34	- 4 <del>+</del> 7	33.02	35.08	+10 -2		
32	39.49	10.64	<b>−</b> 6 <b>−</b> 6				43.21	28.61	+ 2 +6	32.58	35.23	+ 9 -5		

 $\alpha_{1940,0} = 18^{h} \ 19^{m} \ 52.545$   $\delta_{1940,0} = -87^{\circ} \ 39' \ 28.758$ 

#### Obere Kulmination Greenwich

Sg)	χ Octantis	5 <sup>m</sup> 22
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m		Septem	ber		Oktobe	er		Novemb	oer	Dezember		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	C Glieder
		-	in		_	in		_	in		-	in
	18 <sup>h</sup> 20 <sup>m</sup>	87°39′	0.01 0.01	18 <sup>h</sup> 20 <sup>m</sup>	87°39′	0.01 0.01	18 <sub>p</sub> 10 <sub>m</sub>	87°39′	0.01 0.01	18 <sup>h</sup> 19 <sup>m</sup>	87°39′	0.01 0.01
I	32.58	35.23	+ 9 -5	17.75	37.13	- 4 -7	63.02	33.53	- 9 + <sub>4</sub>	54.58	25.62	+ 6 +8
2	32.13	35.37	+ 5 -7	17.24	37.10	- 9 -5	62.63	33.33	<b>一 3</b> +7	54.44	25.31	+12 +6
3	31.68	35.51	○ −8	16.73	37.06	-11 -2	62.24	33.12	+ 3 +8	54.31	24.99	+16 +3
4	31.22	35.64	- 5 -6	16.21	37.02	- 9 +2	61.85	32.90	+10 +7	54.20	24.68	+17 0
5	30.76	35.77	<b>−</b> 9 <b>−</b> 3	15.70	36.98	- 5 +6	61.47	32.69	+15 +5	54.09	24.36	+15 -3
6	30.30	35.89	-10 0	15.19	36.93	+ 1 +8	61.10	32.46	+17 +2	53.99	24.04	+11 -6
7	29.83	36.01	- 7 + <sub>4</sub>	14.68	36.87	+ 7 +8	60.74	32.23	+16 -1	53.90	23.72	+ 5 -7
8	29.36	36.12	- 3 +7	14.17	36.81	+12 +6	60.38	32.00	+13 -4	53.83	23.40	0 -7
9	28.88	36.23	3 +8	13.67	36.74	+16 +4	60.03	31.76	+8 -6	53.76	23.07	- 6 -6
10	28.40	36.33	+ 9 +7	13.16	36.66	+16 +1	59.69	31.52	+ 3 -7	53.70	22.74	-ro -4
11	27.91	36.43	+13 +5	12.66	36.58	+14 -2	59.36	31.28	- 3 -6	53.66	22.41	-12 <b>-</b> 1
12	27.43	36.52	+15 +3	12.16	36.49	+11 -5	59.03	31.03	-8 -5	53.63	22.08	-13 +2
13	26.93	36.60	- -15 0	11.66	36.39	+ 6 -6	58.72	30.78	-11 -3	53.60	21.75	-11 +4
14	26.44	36.68	-⊢12 <b>-</b> 3	11.17	36.29	o -7	58.41	30.52	<b>−13</b> ∘	53.59	21.42	- 8 +6
15	25.94	36.75	+8 -5	10.68	36.19	- 5 -6	58.11	30.26	-13 +3	53.59	21.09	- 3 +7
16	25.44	36.82	+ 3 -7	10.19	36.08	- 9 -4	57.82	29.99	-10 +5	53.60	20.76	+ 2 +6
17	24.94	36.88	-2 -6	9.71	35.96	-12 -2	57.54	29.72	- 7 +6	53.62	20.43	+ 6 +4
18	24.44	36.94	<b>−</b> 7 <b>−</b> 5	9.23	35.84	-14 +1	57.27	29.45	- 2 +7	53.65	20.10	+ 9 +1
19	23.93	36.99	-11 -4	8.75	35.71	-13 + 4	57.00	29.17	+ 3 +5	53.69	19.77	+ 9 -2
20	23.42	37.03	-14 -1	8.28	35.57	—ıo +6	56.75	28.89	+ 7 +3	53.74	19.44	+ 7 -5
2 I	22.91	37.07	-15 +2	7.81	35.43	- 6 + <del>7</del>	56.50	28.61	+9 0	53.80	19.11	+ 2 -7
22	22.39	37.10	-13 +4	7.35	35.28	- 1 +6	56.27	28.32	+8 -3	53.87	18.77	- 4 - <sub>7</sub>
23	21.88	37.13	- 9 +6	6.89	35.13	+ 4 +5	56.04	28.03	+ 4 -6	53.96	18.44	<b>−</b> 9 −6
24	21.36	37.15	- 4 +7	6.44	34.97	+ 8 +2	55.83	27.74	— I —8	54.05	18.11	-12 -3
25	20.85	37.16	+ 1 +6	6.00	34.81	+8-2	55.62	27.44	- 7 -7	54.16	17.78	-12 +I
26	20.33	37.17	+ 6 +4	5.55	34.64	+ 6 -5	55.42	27.15	—11 —5	*)54.27	17.45	- 9 +4
27	19.82	37.18	+9 0	5.12	34.47	+ 2 -7	55.23	26.85	-13 -1	54.40	17.12	- 4 ±7
28	19.30	37.17	+ 9 -3	4.69	34.29	<b>−</b> 3 <b>−</b> 8	55.05	26.55	-II +2	54.53	16.79	+ 2 +8
29	18.79	37.16	+ 6 -6	4.26	34.11	<b>-8</b> -6	54.88	26.24	<b>一 7</b> +6	54.68	16.46	+ 8 +7
30	18.27	37.15	+ 1 —8	3.84	33.92	-11 -3	54.72	25.93	— ı8	54.84	16.13	+13 +5
31	17.75	37.13	- 4 -7	3.43	33-73	-11 o	54.58	25.62	+ 6 +8	55.00	15.81	+16 +2
32	2 - 2 - 2			3.02	33.53	- 9 ±4				55.18	15.48	+15 -2

 $\alpha_{1940.0} = 18^{h} 19^{m} 52.45$ 

 $\delta_{1940.0} = -87^{\circ} 39' 28.758$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Dez. 26.

Sh) o Octantis	5 <sup>m</sup> 48
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т		Janua	r		Februa	ır	März			April		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		_	in		-	in		_	in		_	in
	20 <sup>b</sup> 0 <sup>m</sup>	89° 9′	0.01 0.01	20 <sup>h</sup> 0 <sup>m</sup>	89° 9′	10.01	20 <sup>h</sup> 0 <sup>m</sup>	89° 9′	0.01 0.01	20 <sup>h</sup> 1 <sup>m</sup>	89° 9′	0.01 0.01
I	10.85	63.14	+20 -6	17.45	52.21	-25 0	45.22	43.10	-19 +5	30.28	36.53	+27 +7
2	10.64	62.80	+ 3 -7	18.09	51.86	-24 + 3	46.47	42.83	- 9 +8	31.89	36.39	+35 +5
3	10.47	62.46	-12 -5	18.76	51.52	-17 +6	47.74	42.56	+ 5 +9	33.51	36.25	+38 +2
4	10.32	62.11	-23 -2	19.45	51.18	- 6 +8	49.03	42.30	+18 +8	35.13	36.12	+34 -1
5	10.20	61.76	-27 +I	20.17	50.84	+ 8 +8	50.33	42.04	+29 +6	36.76	35.99	+26 -4
6	10.11	61.41	-25 +4	20.91	50.50	+20 +7	51.65	41.78	+34 +3	38.39	35.87	+14 -6
7	10.04	61.05	-16 + 7	21.67	50.17	+29 +5	52.98	41.53	+35 0	40.03	35.75	+ r −7
8	10.01	60.70	<b>− 2</b> +8	22.46	49.83	+33 +2	54.33	41.28	+30 -3	41.67	35.64	-13 <i>-</i> 7
9	10.00	60.34	+11 +8	23.27	49.50	+32 - 1	55.69	41.03	+21 -5	43.32	35.53	-27 -6
10	10.02	59.99	+23 +6	24.11	49.17	+26 -4	57.07	40.79	+8 -7	44.97	35-43	-36 -4
II	10.07	59.63	+30 +4	24.96	48.84	+16 -6	58.46	40.55	- 6 <del>-7</del>	46.62	35.33	-40 -I
12	10.15	59.28	+33 +1	25.84	48.52	+ 2 -7	59.87	40.32	-20 -7	48.28	35.23	-39 + 2
13	10.25	58.92	+30 -2	26.75	48.19	<b>-13</b> -8	61.29	40.09	-34 -5	49.93	35.14	-29 +4
14	10.39	58.57	+22 -5	27.67	47.87	-28 -7	62.72	39.87	-41 -3	51.59	35.05	-15 +6
15	10.55	58.21	+11 -7	28.62	47.55	-39 -5	64.16	39.65	<b>−43</b> ∘	53.25	34-97	+ r +6
16	10.74	57.85	<b>−</b> 4 −8	29.59	47.24	-45 -2	65.61	39.43	-38 -1-3	54.91	34.90	+17 +4
17	10.95	57.50	-20 -7	30.57	46.92	—43 +ı	67.08	39.22	-26 + 5	56.58	34.83	+27 +1
18	11.20	57.14	-34 -6	31.58	46.61	-33 + <sub>4</sub>	68.56	39.01	<b>-</b> 9 +6	58.24	34.76	+29 -3
19	11.47	56.79	-43 -3	32.61	46.30	-18 +6	70.05	38.80	- - 9 - -5	59.90	34.70	+23 -6
20	11.77	56.43	<b>−44</b> ∘	33.66	45.99	+ 1 +6	71.55	38.60	+23 +3	61.56	34.65	+10 -7
21	*)12.10	56.07	-39 +3	34.73	45.69	+19 +4	73.06	38.40	+31 -1	63.23	34.60	<b>− 5 −7</b>
22	12.45	55.72	-25 + 5	35.82	45.39	+31 +1	74.58	38.21	+30 -4	64.89	34.55	-19 -5
23	12.83	55.36	- 6 + <sub>7</sub>	36.93	45.09	+34 -2	76.12	38.02	+21 -7	66.56	34.51	-27 - 2
24	13.24	55.01	+13 +6	38.06	44.80	+30 -5	77.66	37.84	+ 6 -7	68.22	34.47	-27 ±2
25	13.67	54.65	+28 +3	39.21	44.51	+17 -7	79.21	37.66	- 9 <del>-</del> 6	69.88	34.44	-21 +5
26	14.13	54.30	+37 ∘	40.37	44.22	+ 2 -7	80.77	37.49	<b>-21 -3</b>	71.53	34.42	- 8 +8
27	14.62	53.94	+36 -3	41.56	43.94	-13 -5	82.33	37.32	-27 0	73.19	34.40	+8+9
28	15.13	53.59	+27 -6	42.76	43.66	-23 -2	83.91	37.15	-23 +4	74.84	34.38	+22 +8
29	15.67	53.25	+12 -7	43.98	43.38	-25 + 2	85.49	36.99	-14 +7	76.49	34.37	+33 +6
30	16.24	52.90	- 4 -6	45.22	43.10	-19 +5	87.08	36.83	0 +9	78.13	34.37	+38 +3
31	16.83	52.55	-18 -3				88.68	36.68	+15 +9	79-77	34.37	+38 0
32	17.45	52.21	<b>−25</b> 0			100	90.28	36.53	+27 +7		1,000	No.

$$\alpha_{1940.0} = 20^{\text{h}} \text{ i}^{\text{m}} 45.73$$
 $\delta_{1940.0} = -89^{\circ} \text{ io'} 5.79$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: Jan. 21.

Obere Kulmination Greenwich

Sh)	σ Octantis	5 <sup>m</sup> 48
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m <sub>e</sub> -		Mai		-111	Juni		11.7	Juli		August		
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		_	in			in		_	in		-	in
14	20h 2m	89° 9′	0.01 0.01	20h 3m	89° 9′	0.01 0.01	20h 3m	89° 9′	0.01 0.01	20 <sup>h</sup> 3 <sup>m</sup>	89° 9′	0.01 0.01
I	19.77	34-37	+38 0	6.91	36.76	- 2 -7	39.40	43.03	-36 -4	51.58	52.29	- 6 +6
2	21.41	34.37	+31 -3	8.25	36.91	-17 -7	40.17	43.29	-40 -I	51.53	52.59	+12 +5
3	23.04	34.38	+20 -5	9.58	37.07	-29 -5	40.91	43.55	-37 +2	51.45	52.90	+26 +3
4	24.67	34.39	+ 6 -7	10.89	37.23	-36 -3	41.63	43.82	<b>-28</b> +5	51.35	53.20	+33 0
5	26.29	34.41	- 8 - <sub>7</sub>	12.18	37.39	−38 ∘	42.33	44.09	-13 +6	51.22	53.51	+32 -3
6	27.91	34.43	<b>—21</b> —6	13.46	37.56	-33 + 3	43.00	44.36	+ 3 +6	51.06	53.81	+23 -6
7	29.52	34.46	-32 -4	14.72	37.73	-22 + 5	43.65	44.63	+19 +5	50.87	54.11	+ 8 -7
8	31.13	34.49	<b>−38 −1</b>	15.97	37.91	-6 +6	44.27	44.91	+30 +2	50.66	54.41	-8 -6
9	32.73	34.53	-37 + 1	17.20	38.09	+10 +6	44.87	45.19	+33 -2	50.42	54.71	<b>-2</b> 0 <b>-4</b>
10	34.32	34.58	<u>−31</u> +4	18.41	38.28	+23 +3	45.44	45.47	+28 -5	50.15	55.01	-26 0
11	35.91	34.63	<b>−18</b> +6	19.61	38.47	+30 0	45.99	45.75	+16 -7	49.86	55.31	-25 + 3
12	37.49	34.68	<b>-3</b> +6	20.78	38.66	+29 -3	46.52	46.03	∘ −7	49.54	55.61	-16 +6
13	39.06	34.74	+13 +5	21.94	38.86	+21 -6	47.02	46.32	-15 -6	49.19	55.91	- 4 +8
14	40.62	34.80	+24 +2	23.08	39.06	+ 7 -7	47.50	46.61	-26 -3	48.82	56.20	+10 +8
15	42.17	34.87	+29 —I	24.20	39.27	- 8 -7	47.95	46.89	-29 +I	48.42	56.50	-+24 +7
16	43.72	34.94	+25 -4	25.31	39.48	-22 -5	48.37	47.18	-25 +4	47.99	56.79	+32 +5
17	45.25	35.02	+15 -7	26.39	39.69	-29 -2	48.77	47.48	-14 +7	47.54	57.08	+36 +2
18	46.78	35.10	o —8	27.45	39.91	-29 +2	49.14	47-77	0 +8	47.06	57.37	+33 -1
19	48.29	35.19	-15 -7	28.49	40.13	<b>-22</b> +5	49.49	48.06	+14 +8	46.56	57.66	+26 -4
20	49.80	35.28	-26 -4	29.52	40.35	- 9 +8	49.81	48.36	+27 +6	46.03	57.95	+15 -6
21	51.29	35.38	-31 o	30.52	40.58	+ 6 +8	50.11	48.66	+34 +3	45.47	58.23	+ 1 -7
22	52.77	35.48	-27 +4	31.51	40.81	+21 +7	50.38	48.96	+36 0	44.89	58.51	-14 <b>-</b> 7
23	54.24	35.59	<b>−17</b> +7	32.47	41.05	+325	1 50.62 1 50.83	49.26 49.56	$\begin{vmatrix} +32 & -3 \\ +22 & -5 \end{vmatrix}$	44.28	58.79	-28 -6
24	55.70	35.70	- 1 +8	33.41	41.29	+36 +3	51.02	49.86	+9 -6	43.65	59.06	-38 -4
25	57.15	35.82	+14 +8	34-34	41.53	+36 -1	51.18	50.17	- 6 -7	43.00	59.34	-42 -I
26	58.58	35.94	+27 +7	35.24	41.77	+29 -4	51.32	50.47	-20 -7	42.32	59.61	-40 +2
27	60.00	36.07	+36 +4	36.11	42.01	+18 -6	51.43	50.77	-33 -5	41.61	59.88	-32 + 5
28	61.41	36.20	+39 +1	36.97	42.26	+ 3 -7	51.51	51.07	-40 -2	40.88	60.14	-16 +6
29	62.81	36.33	+35 -2	37.80	42.51	-12 -7	51.57	51.38	—41 <b>⊹</b> 1	40.13	60.40	<b>→ 1</b> +6
30	64.19	36.47	+26 -5	38.61	42.77	<b>-25</b> -6	51.60	51.68	-36 +4	39.35	60.66	+17 +4
31	65.56	36.61	+13 -6	39.40	43.03	-36 -4	51.60	51.99	-23 +6	38.55	60.92	+28 +1
32	66.91	36.76	- 2 -7				51.58	52.29	- 6 +6	37.72	61.18	+31 -2

 $\alpha_{1940.0} = 20^{h} \text{ i}^{m} 45^{s}.73$ 

 $\delta_{1940.0} = -89^{\circ}$  10' 5."09

Sh)	σ Octantis	5 <sup>m</sup> 48
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m		Septeml	oer	111	Oktobe	er	1.00	Novem	ber	11	Dezemb	oer
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
			in		_	in			in		_	in
	20 <sup>h</sup> 3 <sup>m</sup>	89° 10′	10.01	20 <sup>h</sup> 2 <sup>m</sup>	89° 10′	0.01 0.01	20 <sup>h</sup> 1 <sup>m</sup>	89° 10′	0.01 0.01	20 <sup>h</sup> 1 <sup>m</sup>	89° 9′	0.01 0.01
1	37.72	1.18	+31 -2	63.76	6.86	+ 3 -8	78.82	7.50	-29 +2	41.08	62.55	+ 1 +8
2	36.88	1.43	+26 -5	62.39	6.97	-12 -6	77.38	7.42	-20 +5	40.09	62.30	+18 +8
3	36.01	1.68	+14 -7	61.00	7.08	-23 -4	75.95	7.33	- 6 +8	39.13	62.05	+32 +7
4	35.11	1.92	- I -7	59.61	7.18	-27 0	74.53	7.24	+10 +9	38.18	61.79	+41 +4
5	34.20	2.16	-15 -5	58.21	7.27	-23 +4	73.12	7.14	+27 +8	37.26	61.53	+41 +1
6	33.26	2.40	-24 -2	56.80	7.36	-13 +7	71.71	7.04	+38 +6	36.36	61.27	+37 -3
7	32.31	2.63	-25 + 2	55.38	7.44	+ 3 +9	70.32	6.93	+42 +3	35.48	61.00	+25 -5
8	31.33	2.86	-19 +5	53.96	7.52	+18 +9	68.93	6.81	40 <b>−</b> I	34.63	60.73	+11 -6
9.	30.32	3.08	<b>−</b> 7 +8	52.52	7.59	+31 +7	67.56	6.69	+31 -3	33.80	60.45	- 4 <del></del> 6
10	29.30	3.30	+ 8 +9	51.08	7.65	+39 +4	66.20	6.56	+19 -5	32.99	60.17	-17 -6
II	28.26	3.52	- -22 +8	49.63	7.71	+40 +1	64.85	6.42	+ 5 -6	32.21	59.89	-28 -4
12	27.20	3.73	+32 +6	48.18	7.76	+35 -2	63.51	6.28	- 9 6	31.46	59.60	-34 -1
13	26.11	3.94	+37 +3	46.72	7.81	+25 -4	62.18	6.13	-22 -5	30.73	59.31	-35 + 1
14	25.01	4.14	+36 0	45.26	7.85	+13 -6	60.87	5.98	-31 -3	30.03	59.01	<b>−3</b> ○ +4
15	23.89	4.34	+30 -3	43.79	7.88	- 2 -6	59.57	5.82	−36 ∘	29.35	58.71	<b>-2</b> 0 +6
16	22.75	4.53	+19 -5	42.32	7.91	-15 -6	58.29	5.66	-35 + 2	28.70	58.41	- 6 +6
17	21.60	4.72	+ 7 -6	40.84	7.93	-27 -5	57.02	5.49	-28 +4	28.07	58.10	+ 9 +5
18	20.42	4.91	- 8 -7	39.37	7.95	-35 -3	55.77	5.31	<b>-17</b> +6	27.47	57.79	+213
19	19.23	5.09	-21 -6	37.89	7.96	−39 ∘	54.53	5.13	- 3 +6	26.90	57.48	+27 0
20	18.02	5.27	-33 -4	36.41	7.96	-36 + 3	53.31	4.95	+11 +4	26.35	57.16	+26 -3
21	16.80	5.44	_4○ _2	34.93	7.96	-28 +5	52.10	4.76	+22 +2	25.83	56.84	-l-18 —6
22	15.56	5.61	-40 +1	33.46	7.95	-14 +6	50.92	4.56	+26 -1	25.33	56.52	+ 5 -8
23	14.31	5.77	-35 + 3	31.98	7.93	+ 2 +5	49.75	4.36	+22 -5	24.87	56.20	-11 -7
24	13.04	5.92	-24 +5	30.51	7.91	+15 +3	48.60	4.15	+12 -7	24.43	55.87	-24 -5
25	11.75	6.07	- 9 +6	29.03	7.88	+24 0	47.47	3.94	<b>-3-8</b>	24.02	55.54	-32 -2
26	10.45	6.22	+ 8 +4	27.56	7.84	+26 -3	46.35	3.72	-17 -7	23.63	55.21	-31 +2
27	9.13	6.36	+21 +2	26.09	7.80	+19 -6	45.26	3.50	-29 -4	23.28	54.88	-23 +5
28	7.81	6.49	+28 -1	24.63	7.75	+ 7 -8	44.18	3.27	<b>−32</b> ∘	22.95	54.55	<b>−</b> 9 +8
29	6.47	6.62	+26 -4	23.17	7.70	- 8 -8	43.13	3.03	-28 +4	22.65	54.21	+ 8 +8
30	5.12	6.74	+17 -7	21.71	7.64	-22 -6	42.10	2.79	-17 +7	22.38	53.87	+24 +7
31	3.76	6.86	+ 3 -8	20.26	7.57	-29 -2	41.08	2.55	+ 1 +8	22.13	53.54	+35 +5
32				18.82	7.50	-29 +2				21.92	53.20	402

$$\alpha_{1940.0} = 20^{h} 1^{m} 45.73$$

$$\alpha_{1940.0} = 20^{\text{h}} \text{ 1}^{\text{m}} 45^{\text{s}}73$$
 $\delta_{1940.0} = -89^{\text{o}} \text{ 10}' 5.''09$ 

#### Obere Kulmination Greenwich

~ )	Si)	β	Octantis	4 <sup>m</sup> 34
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Tag			r	1,411,131	Februa	ar		März			April	
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		-	in		-	in		_	in		_	in
	22 <sup>h</sup> 39 <sup>m</sup>	81°41′	0.01 0.01	22 <sup>h</sup> 39 <sup>m</sup>	81°41′	10.01	22 <sup>h</sup> 39 <sup>m</sup>	81°41′	0.01 0.01	22h 39m	81°41′	0.01 0.01
1	55.61	61.28	+3 -2	53.11	52.61	-3 -3	52.76	42.15	-3 +2	54.48	30.95	+1 +9
2	55.50	61.06	+2 -5	53.07	52.27	<b>−3</b> ∘	*)52.78	41.77	-2 + 5	54-57	30.62	+3 +8
3	55.39	60.84	∘ −6	53.03	51.93	-3 + 3	52.81	41.40	-1 + <sub>7</sub>	54.66	30.28	+4 +6
4	55.28	60.62	-2 -5	52.99	51.59	<b>-2</b> +6	52.83	41.02	0 +9	54.75	29.95	+4 +3
5	55.18	60.39	-3 -3	52.95	51.25	-r +7	52.86	40.65	+2 +8	54.84	29.62	+4 0
6	55.08	60.15	−3 ∘	52.91	50.90	+r +8	52.89	40.28	+3 +7	54.94	29.30	+3 -3
7	54.98	59.91	-3 + 3	52.88	50.55	+2 +8	52.93	39.90	+4 +5	55.04	28.98	+1 -5
8	54.88	59.67	-2 +6	52.85	50.20	+3 +6	52.96	39.53	+4 +2	55.14	28.66	∘ −7
9	54.78	59.42	o +7	52.82	49.85	+3 +3	53.00	39.16	+3 -1	55.24	28.34	-2 -8
10	54.69	59.17	+1 +8	52.79	49.49	÷4 0	53.04	38.79	+2 -4	55.34	28.03	-3 -8
II	54.59	58.91	+2 +7	52.77	49.14	+3 -3	53.08	38.42	+r -7	55.44	27.72	-4 -6
12	54.50	58.65	+3 +5	52.74	48.78	+2 -5	53.13	38.05	-ı —8	55-55	27.41	-4 -3
13	54.41	58.38	+4 +2	52.73	48.42	∘ −8	53.17	37.68	<b>−2 −8</b>	55.66	27.10	-4 0
14	54.33	58.11	+3 -r	52.71	48.06	-2 -9	53.22	37.32	-4 -8	55.77	26.80	-3 + 3
15	54.24	57.84	+2 -4	52.69	47.70	-3 -9	53.27	36.95	-4 -5	55.88	26.50	-ı +5
16	54.16	57.56	+1 -7	52.68	47.33	-4 -7	53-33	36.59	-5 -2	55.99	26.21	+15
17	54.08	57.28	-1 -9	52.67	46.97	-5 <del>-</del> 4	53.38	36.22	-4 +I	56.11	25.91	+3 +4
18	54.00	56.99	-2 -9	52.66	46.60	-4 -I	53.44	35.86	-2 +4	56.22	25.63	+4 +1
19	53.92	56.70	-4 -8	52.66	46.23	-3 +3	53.50	35.50	0 +5	56.34	25.34	<b>-</b> +4 <b>-</b> -2
20	53.85	56.40	<u>-5</u> -6	52.65	45.87	-ı +5	53.57	35.14	+2 +5	56.46	25.06	+3 -5
21	53.77	56.11	-5 -2	52.65	45.50	+1 +6	53.63	34.78	+3 +3	56.58	24.78	+1 -6
22	53.70	55.80	-4 +I	52.66	45.12	+3 +5	53.70	34.43	+4 +1	56.71	24.51	<b>−</b> 1 <b>−</b> 7
23	53.63	55.50	-2 +4	52.66	44.75	+4 +3	53.77	34.07	+3 -2	56.83	24.24	-2 -5
24	53.57	55.19	0 +6	52.67	44.38	-+4 0	53.84	33.71	+2 -5	56.96	23.97	-3 -2
25	53.50	54.88	+2 +6	52.68	44.01	+3 -3	53.91	33.36	∘ −6	57.09	23.71	-3 + 2
26	53.44	54.56	+4 +5	52.69	43.64	+2 -5	53.99	33.01	<b>−2 −5</b>	57.22	23.45	-2 +5
27	53.38	54.24	+4 +2	52.71	43.26	o6	54.06	32.66	-3 -3	57-35	23.19	-1 +8
28	53.32	53.92	- -4 I	52.72	42.89	-2 -4	54.14	32.32	<b>−3</b> ∘	57.48	22.94	+1 +9
29	53.26	53.60	+3 -4	52.74	42.52	-3 -2	54.22	31.97	<b>-3</b> +4	57.62	22.69	+2 +9
30	53.21	53.27	+r -5	52.76	42.15	<b>−3</b> + <b>2</b>	54-31	31.63	<b>-2</b> -⊢7	57.75	22.45	+3 +7
31	53.16	52.94	-r -5				54.39	31.29	0 +9	57.89	22.21	+4 +5
32	53.11	52.61	-3 -3				54.48	30.95	+1 +9			

 $\alpha_{1940.0} = 22^{h} 40^{m} 3.05$ 

$$\delta_{1940.0} = -81^{\circ} 41' 49.'51$$

<sup>\*)</sup> Tag der doppelten unteren Kulmination: März 2.

#### Obere Kulmination Greenwich

					Si)	βΟ	ctan	tis 4 <sup>m</sup>	34						
Tag	- 1	Mai		1100	Juni			111/	Juli			=00.00	Augus	t	
1 ag	AR.	Dekl.	C Glieder	AR.	Dekl.	© Gli	eder	AR.	Dekl.	© G1	ieder	AR.	Dekl.	© G	ieder
		-	in		-	iı	1			i	n		_	i	n
	22h 39m	81° 41′	0.01 0.01	22 <sup>h</sup> 40 <sup>m</sup>	81°41′	0.01	0.01	22 <sup>h</sup> 40 <sup>m</sup>	81° 41′	0.01	10,01	22 <sup>h</sup> 40 <sup>m</sup>	81° 41′	0.01	0.01
I	57.89	22.21	+4 +5	2.53	17.12	+1	-6	7.19	16.98	-3	-8	II.OI	21.72	-3	+1
2	58.02	21.98	+4 +1	2.69	17.04	0	-7	7.34	17.06		-6	11.11	21.95	-2	+4
3	58.16	21.75	+3 -2	2.85	16.96	-2	-8	7.48	17.14	-4	-3	11.20	22.18	0	+6
4	58.30	21.52	+2 -5	3.01	16.89	-3	<b>-7</b>	7.62	17.23	-4	0	11.29	22.41	+2	+6
5	58.44	21.30	+r -7	3.17	16.82	-4	<b>-</b> 5	7.76	17.33	-3	+3	11.38	22.65	+3	+4
6	58.58	21.08	-ı -8	3.33	16.76	-4	-2	7.90	17.43	<b>—</b> 1	+5	11.47	22.88	+4	- - <b>1</b>
7	58.72	20.87	-3 -8	3.49	16.71	-3	+1	8.04	17.53	+1	<del></del> 6	11.55	23.13	+4	-2
8	58.87	20.66	-4 -6	3.65	16.66	-2	+4	8.18	17.64	+3	+5	11.63	23.37	+2	-5
9	59.01	20.46	-4 -4	3.81	16.61	0	+6	8.32	17.76	+4	+3	11.71	23.62	0	-6
10	59.16	20.26	-4 -ı	3.97	16.57	+2	+6	8.45	17.88	+4	0	11.78	23.87	-r	-6
11	59.30	20.07	-3 +2	4.12	16.54	+-3	+4	8.58	18.00	+3	-3	11.85	24.13	-3	-4
12	59-45	19.88	-r +4	4.28	16.51	+4	+1	8.72	18.13	+1	-6	11.92	24.39	-3	-1
13	59.60	19.69	0 +5	4.44	16.48	+4	<b>-2</b>	8.85	18.27	0	-6	11.99	24.65	-3	+3
14	59.75	19.51	+2 +5	4.60	16.46	+2	-5	8.98	18.41	-2	<b>-5</b>	12.05	24.91	-2	+6
15	59.90	19.33	+3 +3	4.75	16.45	0	-6	9.11	18.56	-3	-3	12.12	25.18	-1	+8
16	60.05	19.16	+4 0	4.91	16.44	-ı	-7	9.24	18.71	-4	0	12.18	25.45	+1	+-8
17	60.21	19.00	÷3 -3	5.07	16.44	-3		9.36	18.87	-3	+4	12.23	25.72	+2	+8
18	60.36	18.84	+2 -6	5.22	16.45	-4	-2	9.48	19.03	-2	+7	12.29	26.00	+3	$\pm 6$
19	60.51	18.68	0 -7	5.38	16.45	-3	<del>+</del> 2	9.60	19.19	0	+8	12.34	26.27	+4	$\pm 3$
20	60.66	18.53	<b>-2</b> -6	5.54	16.47	-2	+5	9.72	19.36	+2	+8	12.39	26.55	<del>+</del> 4	0
21	60.82	18.39	-3 -3	5.69	16.49	<b>—1</b>	+7	9.84	19.53	+3	+7	12.44	26.83	+3	-3
22	60.97	18.25	-4 0	5.85	16.51	+1	+9	9.96	19.71	+4	+5	12.48	27.12	+1	-5
23	61.13	18.11	-3 +4	6.00	16.54	+2	+8	10.07	19.89	+4	+2	12.52	27.41	0	-7
24	61.28	17.98	-2 + <sub>7</sub>	6.15	16.58	+3	+7	10.18	20.08	+3	-I	12.56	27.69	-2	
25	61.44	17.86	0 +9	6.30	16.62	+4	+4	10.29	20.27	+2	-4	12.60	27.98	-3	<del>-</del> 8
26	61.59	17.74	+1 +9	6.46	16.67	+4	+1	10.40	20.46	+1	-6	12.63	28.27	-4	-6
27	61.75	17.62	+3 +8	6.61	16.72	+3	<b>-2</b>	10.51	20.66	—I	-8	12.66	28.57	<b>-</b> 5	-3
28	61.90	17.51	+4 +6	6.75	16.78	+2	<b>-</b> 5	10.61	20.86	-3	-8	12.69	28.86	-4	0
29	62.06	17.41	+4 +3	6.90	16.84	0		10.72	21.07	-4	<del>-</del> 7	12.71	29.16	-3	+3
30	62.22	17.31	+4 0	7.05	16.91	-2	-8	10.82	21.29	-4	-5	12.73	29.46	— <b>I</b>	+5
31	62.38	17.21	+3 -3	7.19	16.98	-3	-8	10.92	21.50	-4	-2	12.75	29.76	+1	
32	62.53	17.12	+ı -6					11.01	21.72	-3	+1	12.77	30.06 30.36	+3	$^{+4}_{+2}$
	2		2 2 2 2 2	4 0 1	2		~~~	0   4	. 0 1				1 4-		

 $\alpha_{1940.0} = 22^{h} 40^{m} 3.05$ 

 $8_{1940.0} = -81^{\circ} 41' 49.51$ 

Si)	β Octantis	4 <sup>m</sup> 34
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m	3.00	Septeml	ber	- 10	Oktob	er	The little	Novem	ber		Dezeml	er
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		_	in			in			in			in
	22 <sup>h</sup> 40 <sup>m</sup>	81° 41′	10,0 10.0	22 <sup>h</sup> 40 <sup>r1</sup>	81°41′	0.01 0.01	22 <sup>h</sup> 40 <sup>m</sup>	81° 41′	0.01 0.01	22 <sup>h</sup> 40 <sup>m</sup>	81° 41′	0.01 0.01
1	112.77	30.06	+3 +41 +4 +25	11.93	39.30	+2 -6	8.77	46.16	-4 - 2	4.60	48.01	-2 +7
2	12.78	30.36	+4 +21 +4 -1	11.86	39.57	○ -7	8.65	46.30	-3 + 2	4.46	47.97	0 +9
3	12.80	30.97	+3 -4	11.79	39.84	-2 -6	8.52	46.45	-2 + 6	4.32	47.93	+2 +9
4	12.81	31.27	+I -6	11.72	40.11	-3 -3	8.38	46.58	-1 + 9	4.18	47.88	+3 +8
5	12.81	31.58	-ı -6	11.64	40.38	<b>−3</b> ∘	8.25	46.71	+1 +10	4.04	47.82	+4 +6
6	12.81	31.88	-2 -5	11.56	40.64	<b>−3 +4</b>	8.12	46.84	+3 + 9	3.90	47.76	+4 +3
7	12.81	32.18	-3 -2	11.48	40.90	-2 +7	7.98	46.96	+4 + 7	3.76	47.70	+3 -1
8	12.81	32.49	<b>-3</b> +2	11.39	41.16	0 +9	7.85	47.07	+4 + 4	3.62	47.63	+2 -3
9	12.80	32.79	-2 +5	11.30	41.42	+2 +9	7.71	47.18	+4 + 1	3.48	47.55	+1 -6
10	12.79	33.10	-ı +8	11.21	41.67	+3 +8	7.57	47.28	+3 - 2	3.34	47.46	-ı -7
11	12.78	33.40	0 +9	11.12	41.92	+4 +6	7.43	47.38	+2 - 4	3.21	47.37	-2 -7
12	12.76	33.71	+2 +9	11.03	42.16	+4 +3	7.29	47.47	0 - 6	3.07	47.28	-3 -6
13	12.74	34.01	+3 +7	10.93	42.40	+3 0	7.15	47.55	-1 - 7	2.94	47.17	-4 -4
14	12.72	34.31	+4 +4	10.83	42.64	+2 -3	7.01	47.63	-3 - 6	2.81	47.06	-4 -1
15	12.69	34.61	+4 +1	10.73	42.87	+1 -5	6.87	47.70	-4 - 5	2.67	46.95	<b>−3</b> +2
16	12.67	34.92	+3 -2	10.63	43.10	o —7	6.73	47.77	-4 - 3	2.54	46.83	-2 +4
17	12.64	35.22	+2 -4	10.53	43.32	-2 -7	6.59	47.83	-4 0	2.42	46.70	0 +5
18	12.60	35.52	o —6	10.43	43.55	-3 -7	6.45	47.88	-3 + 2	2.29	46.57	+2 +5
19	12.57	35.82	-r -8	10.32	43.75	-4 -5	6.31	47.93	-1 + 4	2.16	46.43	+3 +3
20	12.53	36.12	-3 -8	10.21	43.98	<b>-4 -3</b>	6.17	47.97	0 + 5	2.04	46.28	+3 +1
21	12.49	36.42	-4 -7	10.10	44.19	-4 o	6.03	48.00	+2 + 4	1.91	46.13	+3 -3
22	12.45	36.72	-4 -5	9.99	44.39	-3 + 3	5.88	48.03	+3 + 2	1.79	45.97	+2 -5
23	12.40	37.01	-4 -2	9.88	44.59	-1 +4	5.74	48.05	+4 - r	1.67	45.81	○ -7
24	12.35	37.30	-3 + 1	9.76	44.79	+1 +5	5.60	48.07	+3 - 4	1.55	45.64	-r -7
25	12.30	37.59	<b>-2</b> +4	9.64	44.97	+3 +3	5.46	48.08	+1 - 7	1.43	45.47	-3 -5
26	12.24	37.88	0 +5	9.52	45.16	+3 +1	5.31	48.08	0 - 8	1.31	45.29	-4 -2
27	12.19	38.17	+2 +4	9.40	45.34	+3 -2	5.17	48.08	-2 - 7	1.19	45.11	-3 + 2
28	12.13	38.46	+3 +3	9.28	45.51	+2 -5	5.02	48.07	-3 - 4	1.08	44.92	-2 +5
29	12.07	38.74	+4 0	9.16	45.68	+1 -7	4.88	48.06	<b>-</b> 4 0	0.96	44.73	-ı +8
30	12.00	39.02	+3 -3	9.03	45.84	-I -7	4.74	48.04	-3 + 4	0.85	44.53	+1 +9
31	11.93	39.30	+2 -6	8.90	46.00	-3 -5	4.60	48.01	-2 + 7	0.74	44.32	+3 +8
32				8.77	46.16	-4 -2				0.63	44.11	+4 +7

$$\alpha_{1940,0} = 22^{h} 40^{m} 3.05$$

$$\delta_{1940.0} = -81^{\circ} 41' 49''51$$

6	5 <sup>m</sup> 5	Octantis	τ	Sk)
	5.5	Octantis	τ	Sk)

Tag	7907	Janua	r	1 170	Februa	ır	551	März			April	
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
-		_	in		_	in			in		_	in
	23 <sup>h</sup> 19 <sup>m</sup>	87° 48′	0.01 0.01	23 <sup>h</sup> 19 <sup>m</sup>	87° 48′	0.01 0.01	23 <sup>h</sup> 19 <sup>m</sup>	87° 48′	0.01 0.01	23 <sup>h</sup> 19 <sup>m</sup>	87° 48′	0.01 0.01
I	26.05	59.61	+13 -1	13.23	51.59	- 7 -4	8.12	4r17	-13 +1	10.76	29.41	- r 4-9
2	25.54	59.43	+ 9 -4	12.94	51.26	-11 -I	8.08	40.78	-12 +4	10.98	29.05	+ 4 +8
3	25.04	59.24	+ 3 -5	12.65	50.93	-13 +2	8.04	40.40	- 9 ±7	11.20	28.69	+ 9 +7
4	24.54	59.04	- 4 -5	12.37	50.60	-11 + 5	8.02	40.02	<b>-</b> 5 +-8	11.44	28.33	-l-II +-4
5	24.05	58.84	<b>−</b> 9 <b>−</b> 3	12.10	50.27	- 8 + <sub>7</sub>	8.00	39.63	+ 1 +8	11.68	27.97	+12 +1
6	23.56	58.63	—13 —1	11.84	49.93	<b>-</b> 3 +8	7.99	39.24	+ 6 +7	11.93	27.62	+11 -2
7	23.08	58.42	-13 +2	11.58	49.59	+ 2 +8	7.99	38.86	+ 9 +5	12.19	27.27	+ 9 -5
8	22.61	58.20	-10 +5	11.34	49.24	+ 7 +7	8.00	38.47	+11 +3	12.45	26.92	+ 4 -7
9	22.14	57.98	- 6 + <sub>7</sub>	11.10	48.90	+10 +4	8.02	38.09	+12 0	12.72	26.58	- I -8
10	21.68	57.75	— I +8	10.87	48.55	+12 +1	8.05	37.70	+10 -3	13.00	26.23	- 6 -8
II	21.23	57-52	+ 4 +7	10.65	48.20	+12 -2	8.08	37.32	+ 7 -6	13.29	25.89	-10 -7
12	20.78	57.28	+ 8 +6	10.44	47.85	+ 9 -5	*)8.12	36.93	+ 3 -8	13.58	25.56	-14 -4
13	20.33	57.04	+11 +3	10.24	47.49	+ 6 -7	8.17	36.55	- 3 -9	13.88	25.22	-14 -I
14	19.89	56.79	-12 o	10.04	47.13	∘ −9	8.23	36.16	- 8 -8	14.19	24.89	-II +2
15	19.46	56.54	+12 -3	9.85	46.77	<b>-</b> 5 <b>-</b> 9	8.30	35.78	-12 -7	14.51	24.56	<b>− 6</b> +4
16	19.03	56.28	+8 -6	9.68	46.41	-10 -8	8.38	35.40	-14 -4	14.83	24.23	+ 1 +5
17	18.61	56.02	+ 4 -8	9.51	46.04	-14 -5	8.47	35.01	-13 0	15.16	23.91	+7+5
18	18.20	55.75	- 2 -9	9.35	45.68	-I4 -2	8.56	34.63	- 9 +3	15.49	23.59	+12 +3
19	17.80	55.48	-8-9	9.20	45.31	-12 +2	8.66	34.25	- 3 +5	15.84	23.27	+14 0
20	17.40	55.21	-12 -7	9.05	44.94	<b>−</b> 7 +4	8.78	33.87	+ 4 +5	16.19	22.96	+12 -3
21	17.01	54.93	-15 -4	8.92	44.57	0 +6	8.90	33.49	+10 +4	16.54	22.65	+ 8 -6
22	16.63	54.65	-14 0	8.80	44.19	+ 7 +6	9.02	33.12	+14 +2	16.90	22.34	+ I6
23	16.26	54.36	-9+4	8.69	43.82	+12 +4	9.16	32.74	+14 -1	17.27	22.04	-6 -5
24	15.89	54.07	-3 +6	8.58	43.44	+15 +1	9.31	32.36	+11 -4	17.65	21.74	-10 -3
25	15.53	53.77	+ 4 +7	8.48	43.06	+13 -2	9.46	31.99	+ 56	18.03	21.44	-13 +1
26	15.18	53.47	+10 +6	8.39	42.69	+ 8 -4	9.62	31.62	- 2 -6	18.42	21.15	-12 +4
27	14.83	53.16	+14 +3	8.31	42.31	+ 2 -5	9.79	31.24	<b>−</b> 8 <b>−</b> 4	18.81	20.86	- 9 +7
28	14.49	52.86	+14 0	8.24	41.93	<b>- 5 -4</b>	9.97	30.87	-I2 -I	19.21	20.57	<b>-4</b> +9
29	14.17	52.54	+11 -3	8.18	41.55	-10 <b>-2</b>	10.15	30.50	-13 +3	19.62	20.29	+ 2 +9
30	13.85	52.23	+ 6 -5	8.12	41.17	-13 +1	10.35	30.14	-11 +6	20.03	20.01	+ 7 +8
31	13.53	51.91	→ r −5				10.55	29.77	<b>−</b> 7 +8	20.44	19.74	+11 +5
32	13.23	51.59	- 7 -4				10.76	29.41	- I +9			

$$\delta_{1940.0} = -87^{\circ} 48' 45.'03$$

 $<sup>\</sup>alpha_{1940.0} = 23^{\text{h}} \ 19^{\text{m}} \ 51.75$   $\delta_{1940.0} = -87^{\circ} \ 48' \ 45.'03$ 

<sup>\*)</sup> Tag der doppelten unteren Kulmination: März 12.

Sk)	τ Octantis	5 <sup>m</sup> 56
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m		Mai			Juni		14.0	Juli		3	Augus	t
Tag	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		-	in		_	in		_	in		_	in
	23 <sup>h</sup> 19 <sup>m</sup>	87°48′	0.01 0.01	23 <sup>h</sup> 19 <sup>m</sup>	87°48′	0.01 0.01	23 <sup>h</sup> 19 <sup>m</sup>	87° 48′	0.01 0.01	23 <sup>h</sup> 20 <sup>m</sup>	87°48′	0.01 0.01
I	20.44	19.74	+11 +5	35.67	13.43	+ 8 -5	52.34	12.09	- 6 -8	7.43	15.90	-13 0
2	20.87	19.46	+12 +3	36.22	13.30	+ 3 -7	52.89	12.13	-10 -7	7.83	16.10	- 9 +3
3	21.30	19.20	+12 -1	36.77	13.18	- 2 -8	53.43	12.18	-13 -4	8.22	16.31	- 3 + <sub>5</sub>
4	21.73	18.93	-1-10 -4	37.32	13.07	<b>−</b> 7 <b>−</b> 8	53.97	12.24	-14 -1	8.61	16.52	+ 4 +6
5	22.17	18.67	+ 6 -6	37.87	12.96	-11 -6	54.51	12.30	-II +2	8.99	16.73	+10 +5
6	22.61	18.42	+ 1 -8	38.42	12.86	-I3 -3	55.04	12.36	- 6 + <sub>5</sub>	9.36	16.95	+13 +2
7	23.06	18.17	- 4 -8	38.98	12.76	-13 0	55.57	12.43	0 +6	9.72	17.17	+14 -1
8	23.52	17.92	- 9 -7	39.53	12.67	- 9 +3	56.10	12.51	+ 7 +6	10.08	17.40	+11 -4
9	23.98	17.68	-12 -5	40.09	12.58	- 4 + <sub>5</sub>	56.62	12.59		10.43	17.64	+ 5 6
10	24.44	17.44	-13 -2	40.64	12.50	+ 3 +6	57.14	12.68	+14 +1	10.77	17.87	- I -6
п	24.91	17.21	-12 +1	41.20	12.43	+8+5	57.66	12.77	+12 -2	11.10	18.11	-7-4
12	25.39	16.98	- 8 + <sub>4</sub>	41.76	12.36	+12 +2	58.17	12.87	+ 9 -5	11.43	18.36	-II -2
13	25.87	16.76	- 2 +5	42.32	12.29	+13 -1	58.68	12.97	+ 2 -6	11.75	18.61	-12 +2
14	26.35	16.54	+ 5 +5	42.88	12.23	+11 -4	59.19	13.08	- 4 -6	12.05	18.86	-rr +5
15	26.84	16.32	+10 +4	43.44	12.17	+ 6 -6	59.69	13.19	- 9 -4	12.35	19.11	- 7 +7
16	27.33	16.11	+13 +1	44.00	12.13	0 -7	60.19	13.31	-I2 -I	12.65	19.37	- 1 +8
17	27.83	15.91	+13 -2	44.56	12.08	- 6 - 6	60.68	13.44	-12 +3	12.93	19.63	+ 4 +8
18	28.33	15.71	+ 9 -5	45.12	12.05	-11 -3	61.17	13.57	<b>−</b> 10 +6	13.20	19.89	+ 8 +7
19	28.83	15.51	+ 4 -7	45.68	12.02	-13 +1	61.65	13.70	- 5 +-8	13.47	20.16	+11 +4
20	29.34	15.32	- 3 -7	46.24	11.99	-12 +4	62.13	13.84	o +9	13.73	20.43	+12 +1
21	29.85	15.14	<b>−9 −5</b>	46.80	11.97	- 9 + <sub>7</sub>	62.60	13.99	+ 6 +8	13.98	20.70	+11 -2
22	30.36	14.96	—13 —1	47.36	11.96	<b>−</b> 3 +8	63.07	14.14	-i-10 +6	14.22	20.98	+ 9 -5
23	30.88	14.78	-13 +3	47.92	11.95	+ 2 +8	63.53	14.29	+12 +3	14.45	21.26	+ 4 -7
24	31.40	14.61	-11 +6	48.48	11.95	+ 7 +7	63.99	14.45	+12 0	14.67	21.54	— r —8
25	31.92	14.44	- 6 +8	49.04	11.95	+11 +5	64.44	14.62	+11 -3	14.88	21.83	<b>-</b> 6 <b>-</b> 8
26	32.45	14.28	- I +9	49.59	11.96	+13 +2	64.88	14.79	+ 7 -6	15.08	22.12	-11 <b>-</b> 7
27	32.98	14.13	+ 5 +9	50.15	11.97	+12 -1	65.32	14.96	+ 2 -8	15.27	22.41	-14 -5
28	33.52	13.98	+ 9 +7	50.70	11.99	+10 -4	65.75	15.14	<b>−</b> 3 −8	15.45	22.70	-14 <b>-</b> 1
29	34.05	13.83	+12 +4	51.25	12.02	+ 5 -7	66.18	15.32	- 8 <b>-</b> 8	15.62	22.99	-II +2
30	34.59	13.69	+13 +1	51.80	12.05	o —8	66.60	15.51	-12 -6	15.79	23.28	- 6 + <sub>4</sub>
31	35.13	13.56	+11 -2	52.34	12.09	<b>−</b> 6 <b>−</b> 8	67.02	15.70	-r <sub>4</sub> -3	15.94	23.58	0 +5
32	35.67	13.43	+ 8 -5				67.43	15.90	-13 0	16.09	23.88	+ 7 +5

$$\alpha_{1040.0} = 23^h 19^m 51.75$$

$$\alpha_{1940.0} = 23^{h} 19^{m} 51.75$$
 $\delta_{1940.0} = -87^{\circ} 48' 45.03$ 

#### Obere Kulmination Greenwich

Sk)	τ Octantis	5 <sup>m</sup> 56
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					Sk)	τ Octant	is 5".	56		No.		
Tag	× 1	Septem	ber		Oktob	er	14	Novemb	oer	-110-2	Dezemb	er
146	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		-	in	3 1	_	in		_	in		_	in
	23 <sup>h</sup> 20 <sup>m</sup>	87° 48′	10.01 0.01	23 <sup>h</sup> 20 <sup>m</sup>	87° 48′	0.01 0.01	23 <sup>h</sup> 19 <sup>m</sup>	87° 48′	0.01 0.01	23 <sup>h</sup> 19 <sup>m</sup>	87° 48′	10.01
1	16.09	23.88	+ 7 +5	15.39	33.50	+10 - 5	65.18	41.39	-11 - 3	49.39	44.55	-10 +6
2	16.22	24.18	+12 +3	15.20	33.80	+4-6	64.72	41.58	-13 + 1	48.83	44.55	- 5 +8
3	16.35	24.49	+14 0	15.00	34.10	-2 - 6	64.25	41.76	-12 + 4	48.26	44.55	+ 1 +9
4	16.46	24.79	+12 -3	14.79	34.39	-8 - 4	63.78	41.94	-8 + 8	47.69	44.55	+ 7 +9
5	16.56	25.09	+ 8 -5	14.57	34.68	-I2 - I	63.31	42.11	- 2 + 9	47.12	44.54	+11 +7
6	16.65	25.40	+ 2 -6	14.34	34-97	-13 + 3	62.82	42.28	+ 4 +10	46.55	44.52	+13 +4
7	16.74	25.41	- 5 -5	14.10	35.26	-10 + 6	62.34	42.44	+9+8	45.98	44.49	+13 +1
8	16.81	26.02	-10 -3	13.85	35.55	-5 + 9	61.84	42.60	+12 + 6	45.41	44.46	+11 -2
9	16.87	26.33	-I2 +I	13.59	35.84	0 +10	61.34	42.75	+13 + 2	44.84	44.42	+ 7 -5
10	16.93	26.64	-12 +4 - 8 +7	13.32	36.12	+6+9	60.83	42.90	+12 - I	44.27	44-38	+ 2 -7
II	17.00	27.26	- 4 +9	13.04	36.40	+10 + 7	60.32	43.04	+ 9 - 4	43.70	44.33	- 4 <del>-</del> 7
12	17.02	27.58	+ 2 +9	12.75	36.68	+12 + 4	59.81	43.17	+5-6	43.14	44.27	<b>− 8 −</b> 6.
13	17.03	27.89	+ 7 +8	12.46	36.95	+12 + 1	59.29	43.30	o - 7	42.57	44.21	-12 -5
14	17.03	28.21	+10 +5	12.15	37.22	+11 - 2	58.77	43.42	-5-7	42.01	44.14	-13 -2
15	17.02	28.52	+12 +2	11.83	37.48	+7-5	58.24	43.53	-9 - 6	41.45	44.06	-12 +f
16	17.00	28.84	+12 -1	11.51	37.75	+ 3 - 7	57.71	43.64	-12 <b>-</b> 4	40.89	43.98	-9 + 3
17	16.96	29.15	+10 -3	11.18	38-00	-2 - 7	57.17	43.75	-13 - 2	40.34	43.89	<b>− 3</b> +5
18	16.92	29.47	+ 6 -6	10.83	38.26	-7 - 7	56.63	43.85	-11 + 1	39.78	43.79	+ 3 +5
19	16.87	29.78	+ 1 -7	10.48	38.51	-11 - 6	56.09	43.94	- 7 + 4	39.23	43.69	+ 8 +4
20	16.80	30.10	- 4 -8	10.12	38.76	-13 - 4	55-54	44.03	- 2 + 5	38.68	43.58	+12 +2
21	16.73	30.41	- 97	9.75	39.00	-13 - 1	54.99	44.11	+4+5	38.14	43.47	+13 -1
22	16.64	30.73	-12 -6	9.37	39.24	-10 + 2	54.44	44.18	+10 + 3	37.59	43.34	+11 <b>-</b> 4
23	16.54	31.04	-14 -3	8.99	39.48	-5 + 4	53.89	44.25	+12 0	37.06	43.22	+ 5 -7
24	16.44	31.35	-13 0	8.59	39.71	+ 1 + 5	53-33	44.31	+12 - 3	36.52	43.08	∘ −7
25	16.32	31.66	- 9 +3	8.19	39.93	+7+4	52.78	44.36	+ 9 - 6	35.99	42.94	<b>−</b> 7 <b>−</b> 6
26	16.19	31.97	- 3 + <sub>5</sub>	7.79	40.16	+12 + 2	52.22	44.41	+3-7	35.46	42.80	-11 -3
27	16.05	32.28	+ 4 +5	7.37	40.37	+13 - 1	51.66	44.45	-3 - 7	34.94	42.65	<b>−12</b> 0
28	15.90	32.59	+10 +4	6.95	40.59	+11 -4	51.09	44.48	-9-5	34.42	42.49	-12 +4
29	15.74	32.89	+13 +1	6.52	40.80	+7-6	50.53	44.51	-13 - I	33.90	42.33	- 8 ±7
30	15.57	33.20	+13 -2	6.08	41.00	+ 1 - 7	49.96	44.53	-13 + 3	33-39	42.16	<b>- 2</b> +9
31	15.39	33.50	+10 -5	5.63	41.20	- 6 - 6	49-39	44.55	-10 + 6	32.88	41.99	+ 4 +9
32			1232	5.18	41.39	-11 - 3				32.38	41.81	+ 9 +7
	5	<u> </u>	gac \$	ta &	8	992	8 to	8	8	sec 8	t.or 8	

 $\alpha_{i940.0} = 23^h \ i9^m \ 51.75$ 

 $\delta_{1940.0} = -87^{\circ} 48' 45''03$ 

Polnahe Sterne 1940

					-					
m	BD +	-89° 1	BD .	+89° 3	BD +	-89° 37	CPD .	-89° 38		eriod.
Tag	Gr. 10	o™56	Gr.	9 <sup>™</sup> 06	Gr. 1	10 <sup>m</sup> 06	Gr.	9 <sup>m</sup> 5	Nutatio	onsgl.*)
	x	,,	x	,,	x	21	x	4		,,
1940		y		y	2	y		y	in c	10.0
Jan. o	-303.24	+84.91	-103.55	+869.65	-1084.92	-339.18	-43.34	-319.16	-5	-6
I	303.25	84.58	103.56	869.32	1084.93	339.51	43.22	319.49	-1	-8
2	303.25	84.25	103.57	868.99	1084.93	339.85	43.08	319.81	+-2	-7
3	303.25	83.91	103.56	868.65	1084.93	340.18	42.94	320.13	+-4	<del>-4</del>
4	303.24	83.58	103.55	868.32	1084.92	340.51	42.80	320.45	+5	_i
5 6	-303.22	+83.26	-103.54	+868.00	-1084.90	-340.84	-42.65	-320.77	+5	+3
	303.20	82.93	103.52	867.67	1084.88	341.17	42.49	321.08	+3	+-6
7 8	303.17	82.60	103.49	867.34	1084.85	341.50	42.33	321.40	0	+7
	303.13	82.28	103.45	867.02	1084.81	341.83	42.16	321.71	-3	+7
9	303.09	81.95	103.41	866.69	1084.77	342.15	41.99	322.02	<u>_5</u>	+6
10	-303.04	+81.63	-103.36	+866.37	-1084.72	-342.48	-41.81	-322.33	<del>-7</del>	+4
II	302.99	81.31	103.30	866.05	1084.66	342.80	41.62	322.64	<b>一</b> 7	$+\mathbf{r}$
12	302.93	80.98	103.24	865.72	1084.60	343.13	41.43	322.94	<b>—</b> 7	-2
13	302.86	80.66	103.17	865.41	1084.53	343.45	41.24	323.24	<b>—</b> 5	-4
14	302.78	80.34	103.09	865.09	1084.45	343.77	41.04	323.53	-3	-6
15	-302.70	+80.03	-103.01	+864.77	-1084.37	-344.08	-40.83	-323.83	0	-7
16	302.70	79.71	102.93	864.46	1084.29	344.40	40.62	324.12	+4	-7
17	302.52	79.40	102.93	864.15	1084.19	344.71	40.40	324.41	+7	-5
18	302.42	79.40	102.74	863.83	1084.10	345.02	40.18	324.41	+9	-3
19	302.42	78.78	102.74	863.53	1083.99			324.70	+9	+1
						345.33	39.95			
20	-302.20	+78.47	-102.52	+863.22	-1083.88	-345.64	-39.72	-325.26	+-9	+4
21	302.08	78.16	102.40	862.92	1083.76	345.94	39.48	325.54	+6	+6
22	301.96	77.86	102.28	862.62	1083.64	346.24	39.24	325.81	+3	+8
23	301.82	77.56	102.15	862.32	1083.50	346.54	38.99	326.08	-1	+7
24	301.69	77.27	102.01	862.03	1083.36	346.83	38.74	326.34	-4	+5
25	-301.54	+76.98	<b>—101.87</b>	+861.74	-1083.22	-347.12	-38.48	-326.60	<u>-6</u>	+1
26	301.39	76.69	101.72	861.45	1083.07	347.41	38.22	326.86	-7	-3
27	301.24	76.40	101.57	861.17	1082.92	347.70	37.95	327.12	<u>-6</u>	-6
28	301.08	76.12	101.41	860.89	1082.76	347.98	37.68	327.37	-3	-8
29	300.91	75.84	101.24	860.61	1082.59	348.26	37.41	327.62	0	-8
	0 /		· ·		0,					
30	-300.74	+75.57	-101.07	+-860.33 860.06	-1082.42	-348.54	-37.13	-327.86	+3	<del>-6</del>
Fohr 31	300.56	75.30	100.89	_	1082.24	348.81	36.84	328.10	+5	-2
Febr. 1	300.38	75.03	100.71	859.79	1082.06	349.08	36.55	328.34	+5	+1
2	300.19	74.77	100.52	859.52	1081.87	349.35	36.26	328.57	+3	+5
3	300.00	74.51	100.33	859.26	1081.68	349.61	35.96	328.80	I	+7
4	-299.80	+74.25	-100.13	+859.01	-1081.48	-349.87	35.66	-329.02	-2	+8
5	299.60	74.00	99.93	858.75	1081.28	350.12	35.36	329.24	<b>—</b> 5	+7
6	-299.39	+73.75	- 99.72		-1081.07	-350.37	-35.05	-329.45	-7	+5
Mittl. Ort	<b>-279.</b> 89	+78.84	-80.17	+863.56	_1061.57	-345.23	26.22	-307.43		

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

Tag	BD +	-		+89° 3 9 <sup>m</sup> 06		-89° 37 o <sup>m</sup> o6	CPD -		Kurzp Nutatio	
1940	x	y	x	y	x	y	x	y	in c	.01
Febr. 6	-299.39	+73.75	-99.72	+858.51	—1081 <b>.</b> 07	-350.37	-35.05	-329.45	-7	+5
7	299.17	73.51	99.50	858.26	1080.85	350.61	34.74	329.66	-8	+2
8	298.95	73.27	99.28	858.02	1080.63	350.85	34.43	329.87	-7	-I
9	298.73	73.04	99.06	857.79	1080.41	351.09	34.11	330.07	-6	-3
10	298.50	72.81	98.83	857.56	1080.18	351.32	33.79	330.27	-4	-5
II	-298.27	+72.58	-98.60	+857.33	—1079 <b>.</b> 95	-351.55	-33.46	-330.46	-1	-7
12	298.03	72.36	98.36	857.11	1079.71	351.77	33.13	330.65	2	
13	297.79	72.15	98.12	856.90	1079.47	351.99	32.80	330.83	+5	<u>-6</u>
1.4	297.54	71.94	97.87	856.69	1079.22	352.20	32.46	331.01	+-8	<u>-4</u>
15	297.29	71.73	97.62	856.48	1078.97	352.41	32.13	331.18	+9	— <u>i</u>
16	-297.04	+71.53	<b>-97.37</b>	+856.28	-1078.72	-352.61	-31.79	-331.35	+9	+2
17	296.78	71.34	97.11	856.09	1078.46	352.80	31.44	331.52	+8	-+-5
18	296.52	71.15	96.85	855.90	1078.20	352.99	31.10	331.68	+5	+7
19	296.25	70.96	96.58	855.71	1077.93	353.18	30.75	331.84	+1	+7
20	295.98	70.78	96.31	855.53	1077.66	353.36	30.40	331.99	-2	+6
21	-295.70	+70.60	-96.03	+855.35	-1077.38	-353.54	-30.04	-332.14	-5	+3
22	295.43	70.43	95.76	855.19	1077.11	353.71	29.69	332.28	<u>-6</u>	-r
23	295.15	70.27	95.48	855.02	1076.83	353.87	29.33	332.42	<b>-6</b>	-4
24	294.86	70.11	95.19	854.87	1076.54	354.03	28.97	332.55	<u>-4</u>	-7
25	294.58	69.96	94.91	854.72	1076.26	354.18	28.61	332.68	-I	<u>-8</u>
26	-294.29	+69.81	-94.62	+854.57	-1075.97	-354.33	-28.24	-332.80	+2	-7
27	294.00	69.67	94.33	854.43	1075.68	354-47	27.88	332.92	+4	-4
28	293.71	69.54	94.04	854.30	1075.39	354.60	27.51	333.03	+5	0
29	293.41	69.41	.93.74	854.17	1075.09	354.73	27.14	333.14	+4	+3
März 1	293.11	69.29	93.44	854.05	1074.79	354.85	26.77	333-24	+2	+6
2	-292.81	+69.17	-93.14	+853.93	-1074.49	-354.97	-26.39	-333.34	-ı	+7
3	292.50	69.06	92.84	853.82	1074.18	355.08	26.02	333-44	-4	+7
4	292.20	68.96	92.53	853.72	1073.88	355.18	25.65	333.53	-7	+6
5	291.89	68.86	92.22	853.62	1073.57	355.28	25.27	333.61	<del>-8</del>	+3
6	291.58	68.76	91.91	853.53	1073.26	355-37	24.89	333.69	-8	0
7	-291.27	+68.68	-91.60	+853-44	-1072.95	-355.46	-24.51	-333.76	<b>—</b> 7	-3
8	290.95	68.59	91.29	853.36	1072.63	355.54	24.13	333.83	-5	<u>_5</u>
9	290.64	68.52	90.98	853.29	1072.32	355.61	23.75	333.89	-2	-6
10	290.32	68.45	90.66	853.22	1072.00	355.68	23.37	333.95	+1	-7
11	290.00	68.39	90.34	853.16	1071.68	355.74	22.99	334.00	+4	<del>-6</del>
12	-289.68	+68.34	-90.02	+853.11	-1071.36	-355.80	-22.60	-334.05	+6	-4
13	289.36	68.29	89.70	853.06	1071.04	355.84	22.22	334.10	+8	-2
14	-289.04	+68.25	-89.38	+853.02	-1070.72	-355.89	-21.83	-334.14	+9	+1
Mittl. Ort	-279.89	+78.84	_8o.17	+863.56	_1061.57	-345.23	-26.22	-307.43		

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

Polnahe Sterne 1940

				1=							
		BD +	-89° I	BD	+89° 3	BD -	⊢89° 37	CPD	−89° 38		. ,
Ta	ıg	Gr. 10	o <sup>m</sup> =6	Gr	9 <sup>™</sup> 06		10 <sup>™</sup> 06		9 <sup>m</sup> 5		period. onsgl.*)
		01. 10	3.50	01.	9.00	01. )	0.00	GI.	9.5		
19	40	x	y	x	y	x	y	x	y	in	0.01
März	14	-289.04	+68.25	-89.38	+853.02	-1070.72	-355.89	-21.83	-334.14	+9	+1
	15	288.72	68.21	89.06	852.98	1070.40	355.92	21.45	334.17	+8	+4
	16	288.40	68.18	88.74	852.95	1070.08	355.95	21.06	334.20	+-6	+6
	17	288.08	68.16	88.42	852.93	1069.76	355.98	20.68	334.23	3	+-7
	18	287.75	68.14	88.09	852.91	1069.43	356.00	20.29	334-25	0	+7
	19	-287.43	+68.13	-87.77	+852.90	-1069.11	-356.01	-19.91	-334.26	-3	+4
	20	287.11	68.12	87.45	852.89	1068.79	356.02	19.52	334.27	-5	+1
	21	286.79	68.12	87.13	852.89	1068.47	356.02	19.14	334.27	-5	-3
	22	286.47	68.13	86.80	852.90	1068.15	356.01	18.75	334.27	-4	-6
	22	286.15	68.15	86.48	852.92	1067.83	355.99	18.37	334.27	-r	<b>-</b> 8
	23	-285.83	+68.17	-86.16	+852.94	-1067.51	-355.97	-17.98	-334.26	+2	-7
	24	285.51	68.19	85.84	852.96	1067.19	355.95	17.60	334.24	+4	<b>-</b> 5
	25	285.19	68.22	85.52	852.99	1066.87	355.92	17.22	334.22	+5	-2
	26	284.87	68.26	85.20	853.03	1066.55	355.88	16.84	334.20	+-5	2
	27	284.55	68.30	84.88	853.07	1066.23	355.84	16.45	334.17	+3	+-5
	28	-284.23	+68.35	-84.57	+853.12	-1065.91	-355.79	-16.07	-334.13	0	+7
	29	283.91	68.41	84.25	853.18	1065.59	355.73	15.69	334.09	-3	-+-8
	30	283.59	68.47	83.94	853.24	1065.27	355.67	15.31	334.05	6	+7
	31	283.28	68.54	83.62	853.31	1064.96	355.60	14.94	334.00	-8	+4
April		282.97	68.62	83.31	853.39	1064.65	355.52	14.56	333.95	-9	I
	2	-282.66	+68.70	-83.00	+853.47	-1064.34	-355.44	-14.18	-333.89	-8	2
	3	282.35	68.79	82.70	853.56	1064.03	355-35	13.81	333.82	-6	-4
	4	282.05	68.88	82.39	853.65	1063.73	355.26	13.44	333.76	-4	-6
	5	281.74	68.98	82.09	853.75	1063.42	355.16	13.07	333.68	I	-7
	6	281.44	69.08	81.79	853.85	1063.12	355.06	12.70	333.60	+2	-6
	7	-281.14	+69.19	-81.49	+853.96	-1062.82	-354.95	-12.33	-333.52	+5	-5
	8	280.84	69.31	81.19	854.08	1062.52	354.83	11.96	333-43	+7	-3
	9	280.55	69.43	80.90	854.20	1062.23	354.71	11.60	333-34	+-8	0
	10	280.25	69.56	80.60	854.33	1061.93	354.58	11.23	333.24	+8	+3
	TI	279.97	69.69	80.32	854.46	1061.65	354.45	10.87	333.14	+7	+5
	12	-279.68	+69.83	-80.03	+854.60	-1061.36	-354.31	-10.51	-333.03	+4	+-7
	13	279.40	69.98	79.75	854.75	1061.08	354.16	10.16	332.92	+1	+7
	14	279.12	70.12	79.47	854.89	1060.80	354.02	9.80	332.81	-2	+5
	15	278.84	70.28	79.19	855.05	1060.52	353.86	9.45	332.69	-4	+2
	16	278.56	70.44	78.91	855.21	1060.24	353.70	9.10	332.57	-5	—I
	17	-278.29	+70.60	-78.64	+855.37	-1059.97	-353.54	— 8 <b>.</b> 75	-332.44	-4	<u>_5</u>
	18	278.02	70.77	78.37	855-54	1059.70	353.37	8.40	332.31	-2	-7
	19	-277.75	+70.95	-78.10	+855.72	-1059.44	-353.19	- 8.06	-332.17	+1	<del>-8</del>
Mittl.	Ort	-279.89	+78.84	-80.17	+863.56	-1061.57	-345.23	-26,22	-307.43		

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

Tag		+89° 1		+89° 3 9 <sup>m</sup> 06		⊢89° 37 10 <sup>™</sup> 06		—89° 38 · 9 <sup>™</sup> 5	11	period. onsgl.*)
1940	x	y	x	y	x	y	$\boldsymbol{x}$	y	in (	10.01
April 1 2 2 2 2 2 2 2 2 2 2 2 3	-277.75 277.49 277.23 276.98 276.73 4 -276.49 276.25 276.01 275.78 275.55 -275.33 275.11	+70.95 71.13 71.31 71.50 71.70 +71.89 72.10 72.30 72.51 72.73 +72.95 73.18	-78"10 77.84 77.58 77.33 77.08 -76.84 76.60 76.36 76.13 75.90 -75.68 75.46	+855.72 855.90 856.08 856.27 856.46 +856.66 857.07 857.28 857.49 +857.71 857.94	-1059.44 1059.18 1058.92 1058.67 1058.42 -1058.18 1057.93 1057.70 1057.46 1057.23 -1057.01	-353.19 353.01 352.83 352.64 352.44 -352.25 352.04 351.84 351.63 351.41 -351.19 350.96	- 8.06 7.72 7.38 7.04 6.71 - 6.38 6.05 5.73 5.41 5.09 - 4.78 4.47	-332.17 332.03 331.89 331.74 331.58 -331.43 331.26 331.10 330.93 330.75 -330.57 330.39	+1 +4 +6 +6 +5 +2 -1 -5 -7 -9 -9	-8 -7 -4 0 +3 +6 +8 +7 +5 +3 0
	1 274.89 274.68 3 274.48 4 -274.27 274.08 273.88 273.69 273.51	73.41 73.64 73.88 +74.12 74.36 74.61 74.86 75.11	75.25 75.04 74.83 -74.63 74.43 74.24 74.05 73.87	858.17 858.40 858.64 +858.88 859.12 859.37 859.62 859.87	1056.57 1056.36 1056.15 -1055.95 1055.75 1055.56 1055.37 1055.18	35°.73 35°.5° 35°.26 —35°.02 349.78 349.53 349.28 349.03	4.16 3.86 3.56 - 3.26 2.97 2.68 2.39 2.11	330.20 330.01 329.82 -329.62 329.42 329.22 329.01 328.80	-5 -2 +1 +4 +6 +8 +8 +7	$\begin{bmatrix} -5 \\ -7 \\ -7 \\ -6 \\ -4 \\ -1 \\ +2 \\ +4 \end{bmatrix}$
I I I I.	272.99 2 272.83 3 272.68 4 -272.52	+75.37 75.63 75.90 76.17 76.44 +76.71	-73.69 73.52 73.35 73.19 73.04 -72.88	+860.13 860.39 860.66 860.93 861.20 +861.47		-348.77 348.51 348.25 347.98 347.71 -347.44	- 1.83 1.56 1.28 1.02 0.76 - 0.50	-328.58 328.36 328.14 327.91 327.68 -327.45	+5 +2 -2 -4 -5 -5	+6 +7 +6 +4 o
I I I	272.24 272.10 271.97	76.99 77.26 77.55 77.83	72.74 72.60 72.46 72.33	861.75 862.02 862.31 862.59	1054.03 1053.89 1053.75 1053.62	347.16 346.88 346.60 346.32	- 0.24 0.00 + 0.25 0.49	327.21 326.97 326.73 326.49	-3 0 +3 +5	$\begin{vmatrix} -6 \\ -7 \\ -7 \\ -5 \end{vmatrix}$
20 2 2: 2:	271.73 271.62 271.51	+78.12 78.41 78.70 78.99 79.29	72.20 72.08 71.97 71.86 71.76	+862.88 863.16 863.46 863.75 864.04	-1053.49 1053.37 1053.26 1053.15 1053.04	-346.03 345.74 345.45 345.16 344.86	+ 0.73 0.96 1.18 1.41 1.62	-326.24 325.99 325.74 325.48 325.22	+7 +6 +4 +1 -3	$     \begin{array}{r}     -2 \\     +2 \\     +5 \\     +7 \\     +8 \\   \end{array} $
2. 2. 2. 2. Mittl. Ort	271.22	+79.58 79.88 +80.18 +78.84	-71.66 71.57 -71.48 -80.17	+864.34 864.64 +864.93 +863.56	-1052.94 1052.85 -1052.76 -1061.57	-344.57 344.27 -343.97 -345.23	+ 1.84 $2.05$ $+ 2.25$ $-26.22$	$ \begin{array}{c c} -324.96 \\ 324.70 \\ -324.43 \end{array} $ $ -307.43$	-6 -8 -9	+6 +4 +1

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

Polnahe Sterne 1940

		BD +	-80° I	BD.	+89° 3	BD +	-89° 37	CPD .	-89° 38		
Tag	5		-		, ,		, , ,				period. onsgl.*)
		Gr. 1	o <del>~</del> 56	Gr.	9 <sup>™</sup> 06	Gr. 1	10 <sup>m</sup> 06	Gr.	9 <sup>m</sup> 5	110000	, mer.
194	0	$\boldsymbol{x}$	y	x	y	x	y	x	y	in	0.01
Mai	26	-271.13	+80.18	-71.48	+864.93	<b>—1052.76</b>	-343.97	+ 2.25	-324.43	<u>-9</u>	+1
112001	27	271.05	80.49	71.40	865.24	1052.68	343.66	2.45	324.16	<del>-8</del>	-2
	28	270.97	80.79	71.33	865.54	1052.61	343.36	2.65	323.89	-6	-5
	29	270.90	81.10	71.26	865.85	1052.54	343.05	2.84	323.61	-3	<u>_6</u>
	30	270.83	81.40	71.20	866.15	1052.47	342.75	3.02	323.34	0	<b>−</b> 7
		-270.78	+81.71		+866.46						-6
Juni	31			-71.14		-1052.42	-342.44	+ 3.20	-323.06	+3	
Jum	I	270.72	82.02	71.09	866.77	1052.36	342.13	3.38	322.78	+6	<u>-5</u>
	2	270.68	82.33	71.04	867.08	1052.32	341.82	3.55	322.49	+7	-2
	3	270.64	82.64	71.00	867.39	1052.28	341.51	3.71	322.21	+8	+1
	4	270.60	82.95	70.97	867.70	1052.24	341.20	3.87	321.92	+7	+4
	5	-270.57	+83.26	<b>−70.94</b>	+868.01	1052.21	-340.89	+ 4.03	-321.63	+5	+-6
	6	270.55	83.58	70.92	868.33	1052.19	340.57	4.18	321.34	+2	+7
	7	270.53	83.89	70.90	868.64	1052.17	340.26	4.32	321.05	-ı	+-6
	8	270.52	84.20	70.89	868.95	1052.16	339-95	4.46	320.75	<del>-4</del>	+5
	9	270.51	84.52	70.88	869.27	1052.15	339.63	4.59	320.46	-6	+2
	10	-270.51	+84.83	— <sub>70.88</sub>	+869.58	-1052.15	-339.32	+ 4.71	-320.16	-6	_2
	11	270.52	85.15	70.89	869.90	1052.15	339.00	4.83	319.86	<u></u>	-5
	12	270.53	85.47	70.90	870.22	1052.16	338.69	4.95	319.56	2	-7
	13	270.54	85.78	70.92	870.53	1052.18	338.37	5.06	319.26	+1	-7
	14	270.57	86.10	70.94	870.85	1052.20	338.06	5.16	318.95	+4	-6
	15	-270.59	+86.42	<i>−</i> 70.97	+871.17	-1052.23		+ 5.26	-318.65	+6	
	16	270.63	86.73	71.01	871.48	1052.25	-337-74		318.35	+6	<u>-3</u>
		270.67	87.05	71.05	871.80	1052.20	337.43	5.36	318.04	1	)
	17 18				872.12	1052.34	337.11 336.80	5.45		+5	+4 +6
	- 1	270.71 270.76	87.37 87.68	71.09	872.43	1052.34	336.48	5.53	317.73	+2	
	19			71.14				5.61	317.42	1	+7
	20	-270.82	+88.00	-71.20	+872.75	-1052.45	-336.17	+ 5.69	-317.12	-4	+7
	21	270.88	88.32	71.26	873.07	1052.51	335.85	5.75	316.81	<b>一</b> 7	+5
	22	270.95	88.63	71.33	873.38	1052.58	335.54	5.81	316.50	-8	+2
	23	271.03	88.94	71.41	873.69	1052.65	335.23	5.87	316.19	<del>-8</del>	-1
	24	271.11	89.25	71.49	874.00	1052.73	334.92	5.92	315.88	-7	<u>-4</u>
	25	-271.19	+89.56	-71.57	+874.31	-1052.81	-334.60	+ 5.96	-315.57	-4	-6
	26	271.28	89.87	71.66	874.62	1052.90	334.29	6.00	315.26	-1	<b>│</b>
	27	271.38	90.18	71.76	874.93	1053.00	333.98	6.03	314.95	+2	-7
	28	271.48	90.49	71.86	875.24	1053.10	333.67	6.06	314.64	+5	-5
	29	271.59	90.80	71.97	875.55	1053.21	333-37	6.08	314.33	+7	-3
	30	-271.70	+91.10	-72.08	+875.85	-1053.32	-333.06	+ 6.09	-314.02	+-8	0
Juli	I	271.82	91.41	72.20	876.16	1053.44	332.76	6.10	313.71	+8	+3
	2	-271.94	+91.71	-72.33	+876.46	-1053.56	-332.46	+ 6.11	-313.40	+6	+5
34111				144			1.5				
Mittl.	Ort 1	-279.89	+78.84	-80.17	+863.56	-1061-57	-345.23	-26.22	-307.43		

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

# Polnahe Sterne 1940

			0.0	DD	. 0 - 0 .	DD.	0-0	CDD	90000		
Tag		BD +	-89° I		+89° 3		-89° 37		−89° 38	Kurzp Nutatio	
145		Gr. 10	o <sup>m</sup> 56	Gr.	9™06	Gr. 1	o <sup>m</sup> o6	Gr.	9 <sup>m</sup> 5	11442	, magr. ,
1940		x	y	$\boldsymbol{x}$	y	æ	y	x	y	in c	.01
Juli	2	-271.94	+ 91.71	-72.33	+876.46	-1053.56	-332.46	+ 6.11	-313.40	+6	+-5
oun	3	272.07	92.01	72.45	876.76	1053.69	332.15	6.11	313.09	-+4	+7
	4	272.20	92.31	72.59	877.06	1053.82	331.85	6.10	312.78	0	+7
	5	272.34	92.60	72.73	877.35	1053.96	331.56	6.09	312.47	-3	+6
	6	272.48	92.90	72.87	877.65	1054.10	331.26	6.07	312.16	-5	+3
	7	-272.63	+ 93.19	-73.02	+877.94	-1054.25	-330.96	+ 6.04	-311.85	-6	I
	8	272.78	93.48	73.18	878.23	1054.40	330.67	6.01	311.54	6	-4
	9	272.94	93.77	73.34	878.52	1054.56	330.38	5.97	311.24	-4	6
	10	273.11	94.06	73.50	878.81	1054.72	330.09	5.93	310.94	—ı	-7
	II	273.28	94.34	73.67	879.09	1054.89	329.81	5.88	310.63	+2	-7
	12	-273.45	+ 94.63	-73.85	+879.37	-1055.07	-329.52	+ 5.83	-310.33	+-5	-4
	13	273.63	94.91	74.03	879.65	1055.24	329.24	5.77	310.03	+6	-I
	14	273.82	95.19	74.21	879.93	1055.43	328.96	5.70	309.73	+5	+3
	15	274.01	95.47	74.40	880.21	1055.62	328.68	5.63	309.43	+3	+-5
	16	274.20	95.75	74.60	880.49	1055.81	328.40	5.55	309.14	0	+7
	17	-274.40	+ 96.02		+880.76	-1056.01	-328.13	+ 5.47	-308.84	-3	+7
	18	274.61	96.29	75.01	881.03	1056.21	327.86	5.38	308.55	-6	-+-6
	19	274.82	96.56	75.22	881.30	1056.42	327.59	5.29	308.26	<b>—</b> 7	+3
	20	275.03	96.82	75.43	881.56	1056.63	327.33	5.19	307.97	<u>8</u>	0
	21	275.25	97.08	75.65	881.82	1056.85	327.07	5.08	307.68	<b>—</b> 7	-3
	22	-275.47	+ 97.34	-75.87	+882.08	-1057.07	-326.81	+ 4.97	-307.40	<del>-5</del>	-5
	23	275.70	97.60	76.10	882.33	1057.30	326.56	4.86	307.11	-3	-6
	24	275.93	97.85	76.33	882.59	1057.53	326.30	4.74	306.83	+1	-7
	25	276.17	98.11	76.57	882.84	1057.76	326.05	4.61	306.55	-+4	6
	26	276.41	98.35	76.81	883.09	1058.00	325.80	4.48	306.28	+6	-4
	27	-276.65	+ 98.60	-77.05	+883.33	-1058.24	-325.56	+ 4.35	-306.00	+8	-2
	28	276.90	98.84	77.30	883.57	1058.49	325.32	4.21	305.73	+9	+1
	29	277.15	99.08	77.55	883.81	1058.74	325.08	4.06	305.46	+-8	+4
	30	277.41	99.31	77.81	884.04	1059.00	324.85	3.91	305.20	+6	+6
	31	277.67	99.55	78.07	884.28	1059.26	324.61	3.76	304.94	+3	+-7
Aug.	r	-277.94	+ 99.77	-78.33	+884.50	-1059.53	-324.39	+ 3.59	-304.68	-ı	+7
	2	278.20	100.00	78.60	884.73	1059.79	324.16	3.43	304.42	-4	+4
	3	278.48			884.95		323.94	3.26	304.17	6	+1
	4	278.75	100.44	79.15	885.17	1060.34	323.72	3.08	303.91	-6	-3
	5	279.03	100.65	79.43	885.38	1060.62	323.51	2.90	303.67	<b>-</b> 5	<b>-</b> 6
	6	-279.31	+100.86	<b>-79.72</b>	+885.59	-1060.90	-323.30	+ 2.71	-303.42	-2	-7
	7	279.60	101.07	80.01	885.80	1061.19	323.09	2.52	303.18	+1	-7
	8	-279.89		-80.30	+886.00	-1061.48	-322.89	+ 2.32	-302.94	+4	-5
Mittl. O	rt	<b>—279.</b> 89	+ 78.84	-8o.I7	+863.56	1061.57	-345.23	-26,22	-307.43	- 140	

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

Polnahe Sterne 1940

	_			1		1				II	
Ta		BD -	⊢89° I	BD	+89° 3	BD -	-89° 37	CPD -	−89° 38	Kurzp	period.
10	5	Gr. 1	o <sup>m</sup> 56	Gr.	9 <sup>∞</sup> 06	Gr. 1	o <sup>m</sup> o6	Gr.	9 <sup>m</sup> 5	Nutatio	onsgl.*)
194	ļo	x	y	x	y	x	y	x	y	in o	10.0
Aug.	8	-279.89	+101.27	_8o3o	+886.00	<b>—1061.48</b>	-322.89	+ 2.32	-302.94	+4	1
mug.	9	280.18	101.47	80.59	886.20	1061.77	322.69	2.12	302.71	+5	-5 $-2$
	10	280.48	101.66	80.89	886.40	1062.07	322.50	1.92	302.48	+5	+1
	II	280.78	101.85	81.19	886.59	1062.37	322.31	1.71	302.25	+4	+5
	12	281.08	102.04		886.78	1062.67	322.12	1.50	302.03	- <del></del> -I	+7
									-301.81		
	13	-281.39 281.70	+102.23	-81.80	+886.96	-1062.98	-321.93	+ 1.28 1.06	301.60	-2 ~	+7
	14	282.01	102.41	82.12	887.15	1063.29	321.75	0.83	301.30	-5	+7
	15 16	282.33	102.59	82.43	887.32	1063.60	321.57	0.60	301.19	$\begin{vmatrix} -7 \\ -8 \end{vmatrix}$	+4 +1
		282.65	102.76	82.75	887.50 887.67	1063.92 1064.24	321.40	0.36	300.99	-8 -8	-2
	17		102.93	83.07			321.23	0.30			_2
	18	-282.97	+103.10	-83.39	+887.83	-1064.56	-321.07	+ 0.13	-300.79	<b>-</b> 6	-4
	19	283.30	103.26	83.72	888.00	1064.89	320.90	- O.I2	300.60	<u>-4</u>	<del>-6</del>
	20	283.63	103.42	84.05	888.15	1065.22	320.75	0.36	300.41	-1	-7
	21	283.96	103.57	84.38	888.30	1065.55	320.60	0.61	300.23	+2	<u>-6</u>
	22	284.30	103.72	84.71	888.45	1065.88	320.45	0.86	300.05	+5	-5
	23	-284.63	+103.86	-85.05	+888.60	-1066.22	-320.30	- 1.12	-299.88	+7	-3
	24	284.97	104.00	85.38	888.73	1066.55	320.17	1.38	299.71	+9	0
	25	285.31	104.14	85.73	888.87	1066.90	320.03	1.64	299.55	+-8	+3
	26	285.66	104.27	86.07	889.00	1067.24	319.90	1.91	299.39	+7	+5
	27	286.01	104.40	86.42	889.13	1067.59	319.77	2.18	299.24	+-4	7
	28	-286.35	+104.52	-86.76	+889.25	1067.93	-319.65	- 2.45	-299.09	+-r	+-7
	29	286.71	104.64	87.12	889.36	1068.29	319.53	2.73	298.95	2	+6
	30	287.06	104.75	87.47	889.48	1068.64	319.42	3.01	298.81	-5	+3
	31	287.41	104.86	87.82	889.58	1068.99	319.31	3.29	298.68	-6	_I
Sept.	, I	287.77	104.96	88.18	889.69	1069.35	319.21	3.58	298.55	<u>-5</u>	-4
•	2	-288.13	+105.06	-88.54	+889.79	-1069.71	-319.11	- 3.86	-298.43	-3	-7
		288.48	105.16	88.89	889.88	1070.06	319.01	4.15	298.32	0	<del>-</del> 8
	3	288.85	105.25	89.26	889.97	1070.43	318.92	4.44	298.21	+3	-7
	4	289.21	105.25	89.62	890.06	1070.79	318.83	4.74	298.10	+5	-4
	5	289.58	105.42	89.99	890.14	1071.16	318.75	5.04	298.00	+5	0
	7	289.94	+105.50	-90.35	+890.22	-1071.52	-318.67	- 5.33	-297.90	+4	+3
	8	290.31	105.57	90.72	890.29	1071.89	318.60	5.64	297.82	+2	+6
	9	290.68	105.64	91.09	890.36	1072.26	318.53	5.94	297.73	-2	+7
	10	291.05	105.70	91.46	890.42	1072.63	318.47	6.24	297.66	<u>_5</u>	+7
	11	291.42	105.76	91.83	890.48	1073.00	318.41	6.55	297.59	<b>—</b> 7	+5
	12	-291.79	+105.82	-92.21	+890.54	-1073.37	-318.35	<b>- 6.86</b>	-297.52	<u>-9</u>	+3
	13	292.16	105.87	92.58	890.59	1073.74	318.30	7.16	297.46	<b>—</b> 8	0
	14	-292.54	+105.92	-92.95	+890.64	<b>—1074.12</b>	-318.25	<del>- 7.48</del>	-297.41	<del>-7</del>	-3
Mittl.	Ort	-279.89	+ 78.84	_8o17	+863.56	—1061.̈57	-345.23	-26.22	-307.43		

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

Ta	<b>S</b>	BD -	•		+89° 3 9 <sup>m</sup> 06		+89° 37 10™06		-89° 38 9 <sup>™</sup> 5		period.
19	40	x	y	x	y	x	y	x	y	in	10.0
Sept	. 14	-292.54	+105.92	- 92.95	+890.64	-1074.12	-318.25	- 7.48	-297.41	7	-3
	15	292.91	105.96	93.33	890.68	1074.49	318.21	7.79	297.36	-5	-5
	16	293.29	106.00	93.71	890.72	1074.87	318.17	8.11	297.32	-2	<u>-6</u>
	17	293.67	106.03	94.09	890.75	1075.24	318.14	8.42	297.28	- <del> -</del> I	-6
	18	294.04	106.06	94.46	890.78	1075.62	318.11	8.74	297.25	+4	<u>_5</u>
	19	-294.42	+106.08	<b>—</b> 94.84	+890.80	-1076.00	-318.09	<b>— 9.05</b>	-297.23	+6	-4
	20	294.80	106.00	95.22	890.82	1076.38	318.08	9.37	297.21	<del>+</del> 8	<b>—</b> I
	21	295.18	106.11	95.60	890.83	1076.75	318.06	9.69	297.20	+8	+-2
	22	295.56	106.11	95.98	890.84	1077.13	318.06	10.01	297.19	+7	+4
	23	295.94	106.11	96.36	890.84	1077.51	318.06	10.32	297.19	+6	+6
	24	-296.32	+106.11	- 96.74	+890.84	-1077.89	-318.06	-10.64	-297.20	+-3	+7
	25	296.70	106.10	97.12	890.83	1078.27	318.07	10.96	297.21	0	+7
	26	297.08	106.09	97.50	890.82	1078.65	318.08	11.28	297.23	-3	+4
	27	297.46	106.07	97.88	890.80	1079.03	318.10	11.59	297.25	-5	+1
	28	297.84	106.05	98.26	890.78	1079.41	318.12	11.91	297.29	-5	-3
	29	-298.22	+106.03	- 98.64	+890.76	-1079.79	318.14	-12.23	-297.32	3	<u>-6</u>
	30	298.60	105.99	99.02	890.72	1080.17	318.18	12.54	297.37	$-\mathbf{r}$	<b>—</b> 7
Okt.	I	298.98	105.96	99.40	890.69	1080.55	318.21	12.86	297.42	+2	-7
10.	2	299.36	105.92	99.78	890.65	1080.93	318.25	13.18	297.47	+5	-5
	3	299.73	105.87	100.15	890.60	1081.30	318.30	13.49	297.53	+6	2
	4	-300.11	+105.82	-100.53	+890.55	-1081.68	-318.35	-13.81	-297.60	+5	+2
	5	300.49	105.76	100.91	890.49	1082.06	318.41	14.12	297.67	+3	+5
	6	300.86	105.70	101.29	890.43	1082.44	318.47	14.43	297.75	o	+-7
	7	301.24	105.64	101.66	890.37	1082.81	318.54	14.74	297.84	-4	+7
	8	301.61	105.57	102.03	890.30	1083.18	318.61	15.05	297.93	-7	+6
	9	-301.98	+105.49	-102.41	+890.22	—1083.56	-318.68	-15.35	-298.03	<b>-</b> -9	+4
	10	302.35	105.41	102.78	890.14	1083.93	318.76	15.65	298.13	-9	-+- I
	11	302.72	105.33	103.15	890.06	1084.30	318.85	15.95	298.24	-8	-2
	12	303.09	105.24	103.52	889.97	1084.67	318.94	16.25	298.36	6	<u>_5</u>
	13	303.46	105.14	103.89	889.87	1085.04	319.03	16.55	298.48	-3	-6
	14	-303.82	+105.04	-104.25	+889.77	-1085.40	-319.13	-16.85	-298.61	0	-7
	15	304.19	104.94	104.62	889.67	1085.77	319.24	17.14	298.74	+3	-6
	16	304.55	104.83	104.98	889.56	1086.13	319.35	17.43	298.88	+5	<u> </u>
	17	304.91	104.71	105.34	889.44	1086.49	319.47	17.72	299.03	+7	-2
	18	305.27	104.60	105.70	889.33	1086.85	319.58	18.00	299.18	+8	+1
	19	-305.63	+104.47	-106.06	+889.20	-1087.21	-319.71	-18.28	-299.33	+-7	+4
	20	305.98	104.34	106.41	889.07	1087.56	319.84	18.56	299.50	+6	+6
	21	_306.34	+104.21	-106.77	+888.94	-1087.92	-319.97	-18.83	-299.66	+4	+7
Mittl.	Ort	-279.89	+ 78.84	—80 <b>.</b> 17	+863.56	—1061 <sub>57</sub>	-345.23	-26.22	-307.43		

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

Polnahe Sterne 1940

		18		1				_		
		BD -	+89° 1	BD	+89° 3	BD -	⊢89° 37	CPD	−89° 38	Kurzperiod.
Ta	ıg	Gr. 1	o <sup>™</sup> 56	Gr.	9 <sup>m</sup> 06	Gr 1	:o <sup>m</sup> :o6	Gr.	9 <sup>m</sup> .5	Nutationsgl.*)
		0.1.			9-00			ļ	9.2	
19	10	$\boldsymbol{x}$	y	x	y	x	y	x	y	in o.or
	+0		,							M 0.01
Okt.	21	-306.34	+104.21	-106.77	+888.94	-1087.92	-319.97	-18.83	-299.66	+ 4   +7
	22	306.69	104.08	107.12	888.81	1088.27	320.10	19.11	299.83	+ I +7
	23	307.04	103.93		888.66	1088.62	320.25	19.38	300.01	- 2 +5
	24	307.38	103.79	107.81	888.52	1088.96	320.39	19.65	300.19	- 4 +2
	25	307.73	103.64		888.37	1089.31	320.54	19.91	300.38	-5
	26	-308.07	+103.48	108.50	+888.21	-1089.65	-320.70	-20.17	-300.57	-4   -5
	27	308.41	103.32	108.84	888.05	1089.99	320.86	20.43	300.77	- I -7
	28	308.75	103.16	109.18	887.89	1090.33	321.02	20.68	300.97	+ 2 -8
	29	309.08	102.99	109.51	887.72	1090.66	321.19	20.93	301.18	+5 -6
	30	309.41	102.82	109.84	887.55	1090.99	321.37	21.17	301.40	+ 6 -4
	31	-309.74	+102.64	-110.17	+887.37	-1001.32	-321.54	-21.41	-301.61	+ 7 0
Nov.	I	310.06	102.46	110.49	887.19	1091.64	321.73	21.64	301.84	+ 5 +4
	2	310.38	102.27	110.81	887.00	1091.96	321.91	21.87	302.07	+ 2 +6
	3	310.70	102.08	111.13	886.81	1092.28	322.10	22.10	302.30	- 2 +8
	4	311.02	101.89	111.45	886.62	1092.60	322.30	22.32	302.54	-5   +7
	5	-311.33	+101.69	-111.76	+886.42	-1092.91	-322.50	-22.54	-302.78	$  - 8   +_5$
	6	311.64	101.49	112.07	886.22	1093.22	322.70	22.75	303.03	-10 + 2
	7	311.94	101.28	112.37	886.01	1093.52	322.91	22.96	303.27	-9 $-r$
	8	312.24	101.07	112.68	885.80	1093.82	323.12	23.16	303.53	$-8$ $\rightarrow$ 4
	9	312.54	100.85	112.97	885.59	1094.12	323.34	23.35	303.79	-5  -6
	10	-312.83	+100.63	-113.27	+885.37	-1094.41	-323.56	-23.55	-304.05	- 2 -7
	11	313.12	100.40	113.56	885.15	1094.70	323.79	23.73	304.31	+ 1   -6
	12	313.41	100.17	113.85	884.92	1094.99	324.02	23.91	304.59	+ 4 -5
	13	313.69	99.94	114.13	884.69	1095.27	324.25	24.09	304.86	+ 6   -3
	14	313.97	99.70	114.41	884.45	1095.55	324.49	24.26	305.14	+ 7 0
					+884.21			-		
	15 16	-314.24	+ 99.46	-114.68		-1095.82 1096.09	-324.73 324.98	-24.43 24.50	-305.42	+ 7 +3 + 6 +5
		314.51	99.21	114.95	883.97 883.72	1096.35	325.22	24.59	305.71 306.00	$\begin{vmatrix} + 6 & +5 \\ + 4 & +6 \end{vmatrix}$
	17 18	314.77	98.97 98.71	115.21	883.47	1096.35	325.48	24.74 24.89	306.29	+ 4 +0 + 1 +7
	19	315.03 315.29	98.46	115.47	883.21	1095.87	325.43	25.03	306.29	$\begin{vmatrix} -2 \\ -4 \end{vmatrix}$
	20	-315.54	+ 98.20	-115.98	+882.96	-1097.12	-325.99	-25.17	<b>-306.88</b>	- 4 +3
	21	315.79	97.94	116.23	882.69	1097.37	326.25	25.30	307.18	<u>- 5</u> 0
	22	316.03	97.67		882.43		326.52		307.48	- 4   -3
	23	316.27	97.40	116.71	882.16	1097.85	326.79	25.55	307.78	- 2 -6
	24	316.50	97.13	116.94	881.89	1098.08	327.06	25.66	308.09	○
	25	-316.73	+ 96.85	-117.17	+881.61	-1098.31	-327.34	-25.77	<del>-308.40</del>	+ 3   -7
	26	316.95	96.57	117.39	881.33	1098.53	327.62	25.87	308.71	+ 6   -5
	27	-317.16	+ 96.29	—117.60	+881.05	1098.74	-327.90	-25.96	-309.03	+ 7   -2
Mittl.	Ort	<b>-279</b> .89	+ 78.84	_8o.17	+863.56	—1061.̈57	-345.23	-26.22	-307.43	J miles

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

_	BD -	+89° 1	BD	+89° 3	BD -	+89° 37	CPD	-89° 38	Kura	period.
Tag	Gr. T	o <sup>m</sup> .56	Gr.	9 <sup>m</sup> 06	Gr. 1	o <sup>m</sup> o6	Gr	9 <sup>m</sup> .5	11	onsgl.*)
	<u> </u>			9.00				9.3		
1940	x	y	x	y	x	y	x	y	in	0.01
Nov. 27	-317.16	+96.29	-117.60	+881.05	-1098.74	-327.90	-25.96	-309.03	+7	-2
28		96.01	117.81	880.77	1098.95	328.19	26.05	309.34	+7.	+2
29	1 0 . 0:	95.72	118.02	880.48	1099.16	328.48	26.13	309.66	+4	+5
30		95.43	118.22	880.19	1099.36	328.77	26.20	309.98	+1	+7
Dez. 1		95.14	118.41	879.90	1099.55	329.06	26.27	310.30	-3	+7
2		+-94.84	-118.60	+879.60	-1099.74	-329.36	-26.34	-310.63	<u>_6</u>	-+-6
3		94.54	118.79	879.30	1099.93	329.66	26.40	310.95	—g	+3
4		94.24	118.97	879.00	1100.11	329.96	26.45	311.28	<u>-9</u>	0
5		93.94	119.14	878.70	1100.28	330.27	26.50	311.61	<b>–</b> 8	-3
6		93.63	119.31	878.39	1100.45	330.57	26.53	311.94	<del>-6</del>	-6
-	-319.03	+93.32	-119.47	+878.08	-1100.61	-330.88	-26.57	-312.27		
7 8	319.19	93.01	119.47	877.77	1100.77	331.19	26.59	312.27	-3 0	<del>-7</del>
	319.19	93.01	119.03	877.46	1100.77	331.51	26.61	312.00		-7 -6
9	319.48	92.78	119.70	877.14	1101.06	331.82	26.62	312.93	+3 +5	-0 -4
11	319.40	92.07	120.06	876.83	1101.20	332.14	26.63	313.60	+5	-4 -1
				_					i .	
12	-319.75	+91.75	-120.19	+876.51	-1101.33	-332.46	-26.62	-313.94	+7	+-2
13	319.88	91.43	120.32	876.19	1101.46	332.78	26.62	314.27	+6	+4
14	320.00	91.11	120.44	875.87	1101.58	333.10	26.60	314.61	+4	+-6
15	320.11	90.79	120.56	875.55	1101.70	333-43	26.58	314.95	+2	-+-7
16	320.22	90.46	120.67	875.22	1101.80	333.75	26.55	315.28	1	+-6
17	-320.32	+90.13	-120.77	+874.90	-1101.91	-334.08	-26.52	315.62	-4	+4
18	320.41	89.81	120.86	874.57	1102.00	334.41	26.48	315.95	<u>—</u> 5	+1
19	320.50	89.48	120.95	874.24	1102.09	334.74	26.43	316.29	<u>-5</u>	_2
20	320.58	89.15	121.04	873.92	1102.17	335.07	26.38	316.62	-4	<del>-5</del>
21	320.66	88.82	121.11	873.59	1102.25	335.40	26.32	316.96	-ı	<u>-7</u>
22	-320.73	+88.49	-121.18	+873.25	-1102.31	-335.73	-26.25	-317.29	+2	-7
23	320.79	88.15	121.24	872.92	1102.38	336.07	26.18	317.63	+5	-6
24	320.85	87.82	121.30	872.59	1102.43	336.40	26.10	317.96	+7	-3
25	320.90	87.48	121.35	872.25	1102.48	336.74	26.01	318.29	+7	0
26	320.95	87.15	121.40	871.92	1102.53	337.07	25.92	318.62	+6	+4
27	-320.98	+86.81	-121.43	+871.58	-1102.56	-337.41	-25.82	-318.95	+-3	+-6
28	321.01	86.48	121.46	871.25	1102.59	337.75	25.72	319.28	-1	+7
29	321.04	86.14	121.49	870.92	1102.62	338.08	25.61	319.60	-4	+7
30	321.06	85.81	121.51	870.58	1102.64	338.42	25.49	319.93	-7	+5
31	321.07	85.47	121.52	870.25	1102.65	338.76	25.37	320.25	<u>-</u> 9	+2
32	-321.07	+85.14	-121.52	+869.92	-1102.65	-339.09	-25.24	-320.58	<u>-9</u>	-2
Mittl. Ort	-279"89	+78.84	_ 8o.17	+863.56	-1061.57	-345.23	-26.22	-307.43		

<sup>\*)</sup> Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.

#### Formeln

#### zur Reduktion auf den scheinbaren Ort

$$\begin{array}{l} A = t - (\text{o.34213} + \text{o.00034} \ T) \sin \Omega + \text{o.00415} \sin 2 \Omega - \text{o.02525} \sin 2 \ L_{\odot} \\ + \text{o.00250} \sin \ M_{\odot} - \text{o.000099} \sin \left(2 \ L_{\odot} + M_{\odot}\right) + \text{o.00042} \sin \left(2 \ L_{\odot} - M_{\odot}\right) \\ + \text{o.00024} \sin \left(2 \ L_{\odot} - \Omega\right) + \text{o.00010} \sin \left(2 \ L_{\odot} - 2 \ M_{\odot} - \Omega\right) \\ + \text{o.00008} \sin \left(2 \ L_{\odot} - 2 \ L_{\odot} + 2 \ M_{\odot}\right) \\ A' = - \text{o.00405} \sin 2 \ L_{\odot} + \text{o.000135} \sin \ M_{\odot} - \text{o.00067} \sin \left(2 \ L_{\odot} - \Omega\right) \\ - \text{o.00052} \sin \left(2 \ L_{\odot} + M_{\odot}\right) + \text{o.00012} \sin \left(2 \ L_{\odot} - 2 \ L_{\odot}\right) \\ + \text{o.00012} \sin \left(2 \ L_{\odot} - M_{\odot}\right) + \text{o.00012} \sin \left(2 \ L_{\odot} - 2 \ L_{\odot}\right) \\ + \text{o.00012} \sin \left(4 \ L_{\odot} - 2 \ L_{\odot} - M_{\odot}\right) - \text{o.00008} \sin \left(2 \ L_{\odot} + M_{\odot} - \Omega\right) \\ B = - \left(9^{\prime\prime} 2 \cos \left(2 \ L_{\odot} + M_{\odot}\right) + \text{o''.009} \cos \left(2 \ L_{\odot} - M_{\odot}\right) \\ + \text{o''.007} \cos \left(2 \ L_{\odot} - \Omega\right) + \text{o''.003} \cos \left(2 \ L_{\odot} - M_{\odot}\right) \\ + \text{o''.005} \cos \left(2 \ L_{\odot} - \Omega\right) + \text{o''.003} \cos \left(4 \ L_{\odot} - 2 \ M_{\odot}\right) - \text{o''.003} \cos \left(4 \ L_{\odot} - \Omega\right) \\ + \text{o''.005} \cos \left(2 \ L_{\odot} - M_{\odot}\right) + \text{o''.003} \cos \left(4 \ L_{\odot} - \Omega\right) - \text{o''.003} \cos \left(4 \ L_{\odot} - \Omega\right) \\ + \text{o''.005} \cos \left(2 \ L_{\odot} - M_{\odot}\right) + \text{o''.003} \cos \left(4 \ L_{\odot} + \Omega\right) - \text{o''.003} \cos \left(4 \ L_{\odot} - \Omega\right) \\ \end{array}$$

- 0″.002  $\cos (4\,L_{\rm C}-2\,L_{\rm O}-M_{\rm C})$  - 0″.002  $\cos (2\,L_{\rm C}+M_{\rm C}-\Omega)$ 

$$C = -20''.47 \cos(\cdot) \cos \varepsilon$$

$$D = -20''.47 \sin \odot$$

$$E = -(0.0029 - 0.0004 T) \sin \Omega$$

T Zeit seit 1900.0 in Einheiten von 100 tropischen Jahren, t Zeit seit Beginn des annus fictus in Bruchteilen des tropischen Jahres: t = 0 für 1940 Januar 1.5014 Welt-Zeit.

$$a=m+{}^1/_{15}n\sin\alpha$$
 tg  $\delta$   $a'=n\cos\alpha$   $b={}^1/_{15}\cos\alpha$  tg  $\delta$   $b'=-\sin\alpha$   $c={}^1/_{15}\cos\alpha$  sec  $\delta$   $c'=\mathrm{tg}\,\varepsilon\cos\delta-\sin\alpha$  sin  $\delta$   $d'=\cos\alpha\sin\delta$ 

Für 1940.0 gilt: 
$$m = +3.0731$$
,  $n = +20.043$ ,  $\epsilon = 23^{\circ} 26' 49.52$   
 $\alpha_{\rm app.} = \alpha_{\rm 1940.0} + t \mu_{\alpha} + A \alpha + B b + C c + D d + E + [A' \alpha + B' b]$   
 $\delta_{\rm app.} = \delta_{\rm 1940.0} + t \mu_{\delta} + A \alpha' + B b' + C c' + D d' + [A' \alpha' + B' b']$ 

 $\mu_{\alpha},\,\mu_{\delta}$  jährliche Eigenbewegung in Rektaszension, bez. Deklination.

Setzt man

$$f = mA + E$$
  $f' = mA'$   $i = C \operatorname{tg} \varepsilon$   
 $g \sin G = B$   $g' \sin G' = B'$   $h \sin H = C$   
 $g \cos G = nA$   $g' \cos G' = nA'$   $h \cos H = D$ ,

so wird:

$$\begin{split} \alpha_{\rm app.} &= \alpha_{\rm 1940.0} + t\,\mu_{\alpha} + f + {}^{1}\!/_{15}\,g\,\sin{(G+\alpha)}\,\lg{\delta} + {}^{1}\!/_{15}\,h\,\sin{(H+\alpha)}\,\sec{\delta} \\ &+ [f' + {}^{1}\!/_{15}\,g'\sin{(G'+\alpha)}\,\lg{\delta}] \\ \delta_{\rm app.} &= \delta_{\rm 1940.0} + t\,\mu_{\delta} + g\,\cos{(G+\alpha)} + h\,\cos{(H+\alpha)}\sin{\delta} + i\cos{\delta} \\ &+ [g'\cos{(G'+\alpha)}] \end{split}$$

### für 12h Sternzeit Greenwich

Welt	-Zeit	t	log A	$\log B$	$\log C$	$\log D$	E
19.	40						
Jan.	0.2	-0.0035	9.19072	0.94973	0.45056n	1.30617	+0.0012
oun.	10.2	+0.0238	9.27434	0.94704	0.78204n	1.28731	10.0012
	20.2	0.0511	9.34054	0.94166	0.95880n	1.25310	11
	30.1	0.0784	9.39317	0.93420	1.07350n	1.20101	II
Febr.	9.1	0.1057	9.43511	0.92593	1.15287n	1.12613	11
1 001.	9.1	0.1037	9,43311	0.92393	1.1320/11	1.12013	**
	19.1	0.1330	9.46863	0.91787	1.20809n	1.01916	+0.0010
	29.1	0.1603	9.49589	0.91153	I.24477n	0.85884	Io
März	10.0	0.1876	9.51883	0.90784	1.26609n	0.57898	10
	20.0	0.2149	9.53911	0.90741	1.27365n	9.42813	10
	30.0	0.2422	9.55840	0.91057	1.26816n	0.51162n	09
April	9.0	0.2696	9.57788	0.91687	1.24949n	0.82269n	+0.0009
ATT IS	18.9	0.2969	9.59847	0.92572	1.21669n	0.99273n	09
	28.9	0.3242	9.62066	0.93596	1.16767n	1.10459n	09
Mai	8.9	0.3515	9.64445	0.94665	1.09844n	1.18281n	09
	18.8	0.3788	9.66954	0.95660	I.00134n	1.23812n	08
	0.0	0.	, ,,,	, ,	0	Ü	
· ·	28.8	0.4061	9.69545	0.96506	0.86022n	1.27605n	+0.0008
Juni	7.8	0.4334	9.72144	0.97128	0.63104n	1.29957n	08
	17.8	0.4607	9.74686	0.97488	0.07518n	1.31025n	08
т 11	27.7	0.4880	9.77109	0.97571	0.28466	1.30882n	07
Juli	7.7	0.5153	9.79364	0.97382	0.69767	1.29526n	07
	17.7	0.5426	9.81415	0.96956	0.89807	1.26869n	+0.0007
	27.7	0.5699	9.83243	0.96332	1.02608	I.22747n	07
Aug.	6.6	0.5972	9.84842	0.95578	1.11521	1.16826n	06
	16.6	0.6245	9.86221	0.94797	1.17909	1.08504n	06
	26.6	0.6518	9.87405	0.94086	1.22417	0.96586n	06
Sept.	5.5	0.6791	9.88430	0.93531	1.25382	0.78190n	+0.0006
Dept.	15.5	0.7064	9.89341	0.93331	1.26996	0.42684n	0.0000
	25.5	0.7004	9.09341	0.93227	1.27335	9.90580	
Okt.		0.7610		, ,	1.26399	0.63104	05
OKU.	5·5 15·4	0.7883	9.91037	0.93546	1.24110	0.88315	05
	15.4		9.91932	0.94101	1.24110	Ü	05
1,000	25.4	0.8156	9.92917	0.95002	1.20284	1.03334	+0.0005
Nov.	4.4	0.8429	9.94019	0.95980	1.14600	1.13500	04
	14.4	0.8702	9.95246	0.96974	1.06461	1.20666	04
	24.3	0.8975	9.96584	0.97859	0.94670	1.25665	04
Dez.	4.3	0.9249	9.98006	0.98565	0.76350	1.28930	04
	14.3	0.9522	9.99465	0.99007	0.40943	1.30700	+0.0003
	24.2	0.9795	0.00918	0.99140	9.87622n	1.31076	03
	34.2	1.0068	0.02312	0.98958	0.60767n	1.30077	+0.0003
	57.2	1.0000	2.5-3.2	-190930	10100	3-9/1	. 5.5553

		Oh Welt-Zeit										
Tag		Stern- zeit Greenw.	t	f	$\log g$	G	$\log h$	Н	log i	i		
1940	>	ì										
Jan.		h	a	8		h m	T arol	h m	0.0766	, T. T.O.O.		
Jau.	0	6.6 6.6	-0.0041 -0.0014	+0.475	0.9745	4 43.4	1.3104	23 29.1	0.0766n	-1.193		
	1	6.7		0.486	0.9754	4 41.8	1.3102	23 25.3 23 21.6	0.1258n	1.336		
	2	6.8	+0.0014	0.496	0.9763	4 40.3	1.3100	_	0.1700n	1.621		
	3	6.8	0.0041	0.506	0.9773	4 38.7	1.3098	23 17.8	0.2098n 0.2460n	1.762		
	4			0.517	0.9782	4 37.2	1.3095					
	5	6.9	0.0096	0.527	0.9790	4 35.6	1.3092		0.2794n	1.903		
	6	7.0	0.0123	+0.537	0.9799	4 34.1	1.3089	23 6.5	0.3105n	-2.044		
	7	7.0	0.0151	0.547	0.9808	4 32.6	1.3086	23 2.7	0.3393n	2.184		
	8	7.1	0.0178	0.557	0.9816	4 31.1	1.3083	22 58.9	0.3660n	2.323		
	9	7.2	0.0205	0.567	0.9824	4 29.6	1.3080	22 55.1	0.3913n	2.462		
	10	7.2	0.0233	0.577	0.9832	4 28.1	1.3076	22 51.3	$0.4148_{n}$	2.599		
	II	7.3	0.0260	0.587	0.9840	4 26.6	1.3072	22 47.5	0.4371n	2.736		
	12	7.4	0.0287	+0.597	0.9848	4 25.1	1.3068	22 43.7	0.4582n	-2.872		
	13	7.4	0.0315	0.607	0.9855	4 23.6	1.3064	22 39.9	0.4781n	3.007		
	14	7.5	0.0342	0.616	0.9863	4 22.1	1.3059	22 36.1	0.4972n	3.142		
	15	7.6	0.0370	0.626	0.9870	4 20.7	1.3055	22 32.2	0.5152n	3.275		
	16	7.6	0.0397	0.635	0.9877	4 19.2	1.3050	22 28.4	0.5324n	3.407		
	17	7.7	0.0424	0.645	0.9884	4 17.8	1.3045	22 24.5	0.5488n	3.538		
	18	7.8	0.0452	+0.654	0.9891	4 16.4	1.3040	22 20.7	0.5643n	-3.667		
	19	7.8	0.0479	0.664	0.9898	4 15.0	1.3035	22 16.8	0.5793n	3.796		
	20	7.9	0.0506	0.673	0.9905	4 13.6	1.3030	22 13.0	0.5936n	3.923		
	21	7.9	0.0534	0.682	0.9911	4 12.2	1.3025	22 9.1	0.6075n	4.050		
	22	8.0	0.0561	0.691	0.9918	4 10.8	1.3019	22 5.2	0.6207n	4.175		
	23	8.1	0.0589	0.700	0.9924	4 9.5	1.3013	22 1.3	0.6333n	4.298		
	24	8.1	0.0616	+0.709	0.9930	4 8.1	1.3007	21 57.4	0.6454n	-4.420		
	25	8.2	0.0643	0.718	0.9936	4 6.8	1.3001	21 53.5	0.6572n	4.541		
	26	8.3	0.0671	0.726	0.9942	4 5.5	1.2995	21 49.5	0.6684n	4.660		
	27	8.3	0.0698	0.735	0.9948	4 4.2	1.2989	21 45.6	0.6792n	4.778		
	28	8.4	0.0726	0.743	0.9954	4 2.9	1.2983	21 41.6	0.6897n	4.894		
	29	8.5	0.0753	0.752	0.9960	4 1.6	1.2977	21 37.7	$0.6998_n$	5.009		
	30	8.5	0.0780	+o.760	0.9966	4 0.3	1.2971	21 33.7	0.7094n	-5.121		
	31	8.6	0.0808	0.768	0.9971	3 59.0	1.2964	21 29.7	0.7188n	5.233		
Febr.	I	8.7	0.0835	0.776	0.9976	3 57.8	1.2958	21 25.7	0.7279n	5.344		
	2	8.7	0.0862	0.784	0.9982	3 56.6	1.2951	21 21.7	0.7366n	5.452		
	3	8.8	0.0890	0.792	0.9987	3 55-4	1.2945	21 17.7	0.7449n	5.558		
	4	8.9	0.0917	0.800	0.9993	3 54.2	1.2938	21 13.7	0.7530n	5.663		
-		8.9	0.0945	+0.807	0.9998	3 53.0		21 9.7	0.7608n	-5.765		
	5	9.0	0.0945	0.815	1.0004		1.2932	21 5.6	0.7683n	5.866		
						3 51.9	1.2925		0.7083n $0.7756n$	5.965		
	7 8	9.1	0.0999	0.823	1.0009	3 50.7	1.2919	21 1.5	0.7750n $0.7826n$			
		9.1	0.1027	0.837	1.0014	3 49.6		j		6.062		
	9	9.2	0.1054	-	1.0020	3 48.5	1.2905		0.7894n	6.157		
	10	9.3	0.1081	+0.844	1.0025	3 47.4	1.2899	20 49.3	0.7959n	-6.251		

	Oh Welt-Zeit											
Tag	f' g'		G'	Allgemeine Präzession seit 1940.0		Δψ'	Mittlere Schiefe	Δε	Δε'	j	k	
1940	in o.oor	in o.or	h			in o.or	23° 26′		in o.o1	in o	001	
Jan. o	+ 8	-+-8	20.6	-0.21	+7.98	+13	49.52	-8.91	+6	41	89	
I	+ 3	8	19.1	-0.07	8.02	+ 6	49.52	8.91	+-7	41	89	
2	<b>—</b> 2	7	17.4	+0.07	8.05	<b>—</b> 3	49.52	8.90	+7	41	89	
3		6	15.5	0.21	8.08	- 9	49.51	8.90	+5	41	89	
4		5	13.2	0.34	8.11	-13	49.51	8.89	+-2	41	89	
5	<b>-</b> 8	5	10.7	0.48	8.14	-13	49.51	8.89	-2	42	89	
6	-5	+6	8.3	+0.62	+8.16	— 9	49.51	-8.88	-5	42	89	
7	1	7	6.5	0.76	8.19	— <sub>2</sub>	49.51	8.88	-7	42	89	
8		8	5.0	0.89	8.22	+ 5	49.51	8.87	-7	42	89	
9		8	3.6	1.03	8.24	+12	49.51	8.86	<del>-6</del>	42	89	
10	+10	8	2.3	1.17	8.27	+16	49.51	8.86	-4	42	89	
11	+11	8	0.9	1.31	8.29	+19	49.50	8.85	-2	42	89	
12	+11	+7	23.3	+1.44	+8.32	+18	49.50	-8.84	-+-I	42	88	
13		7	21.6	1.58	8.34	+14	49.50	8.83	+4	42	88	
14		7	19.9	1.72	8.36	+ 8	49.50	8.82	+6	42	88	
15		7	18.1	1.86	8.38	+ 1	49.50	8.81	-+-7	42	88	
16		8	16.4	2.00	8.40	<b>—</b> 8	49.50	8.80	+7	42	88	
17		8	14.8	2.13	8.41	-15	49.50	8.78	+6	42	88	
-18	-13	+9	13.4	+2.27	+8.43	-21	49.49	-8.77	+3	43	88	
19	-14	9	12.0	2.41	8.44	-24	49.49	8.76	0	43	88	
20	-14	9	10.6	2.55	8.46	-23	49.49	8.75	-3	43	88	
21	-11	9	9.3	2.68	8.47	-17	49.49	8.73	6	43	88	
22	<u> </u>	8	7.7	2.82	8.48	<b>-</b> 9	49.49	8.72	<b>—</b> 7	43	87	
23	0	7	5.8	2.96	8.49	+ 1	49.49	8.70	<del>-7</del>	43	87	
24	+ 6	+6	3.6	+3.10	+8.49	+10	49.49	-8.69	5	43	87	
25		6	1.1	3.23	8.50	+15	49.49	8.67	-2	43	87	
26		7	22.9	3.37	8.50	+17	49.48	8.66	+2	43	87	
27	+ 9	8	21.2	3.51	8.51	+15	49.48	8.64	+5	43	87	
28	+ 5	8	19.6	3.65	8.51	+ 8	49.48	8.63	+7	43	87	
29	0	7	18.1	3.78	8.51	0	49.48	8.61	+7	43	87	
30	-4	+6	16.4	+3.92	+8.51	l — 7	49.48	-8.60	+6	43	86	
31		5	14.1	4.06	8.50	-11	49.48	8.58	+-3	43	86	
Febr. 1		5	11.3	4.20	8.50	-12	49.48	8.57	-r	43	86	
2	-6	6	8.8	4.33	8.49	<b>-</b> 9	49.48	8.55	-4	43	86	
3	3 - 2	7	6.7	4.47	8.48	- 3	49.47	8.53	-7	43	86	
4		8	5.2	4.61	8.47	+ 4	49-47	8.52	<del>-8</del>	44	86	
5	+ 7	+8	3.9	+4.75	+8.46	+11	49.47	-8.50	-7	44	86	
ě		8	2.5	4.88	8.45	+16	49.47	8.48	$-\dot{5}$	44	86	
7		8	1.2	5.02	8.43	+19	49-47	8.47	-2	44	85	
8		7	23.8	5.16	8.41	+19	49.47	8.45	0	44	85	
ç	+ 9	7	22.3	5.30	8.39	+16	49-47	8.43	+3	44	85	
10	-		20.5	+5.43	+8.37	+10	49.47	-8.42		44	85	

	0 <sup>h</sup> Welt-Zeit										
Tag	Stern- zeit Greenw.		f	log g	G	log h	Н	$\log i$	$i$		
1940			1-12				-2-				
Febr. 10	9.3	0.1081	+0.844	1.0025	h m	1.2899	20 49.3	0.7959n	-6.251		
II	9.3	0.1100	0.851	1.0030	3 47·4 3 46.3	1.2892	20 45.2	0.80221	6.342		
12	9.4	0.1136	0.858	1.0035	3 45.2	1.2886	20 41.1	0.8083n	6.431		
13	9.5	0.1164	0.865	1.0040	3 44.2	1.2879	20 37.0	0.814In	6.518		
14	9.5	0.1191	0.872	1.0045	3 43.2	1.2873	20 32.8	0.8197n	6.603		
15	9.6	0.1218	0.879	1.0050	3 42.2	1.2866	20 28.7	0.8252n	6.687		
16	9.7	0.1246	+0.885	1.0055	3 41.2	1.2860	20 24.5	0.8304n	-6.767		
17	9.7	0.1273	0.892	1.0060	3 40.2	1.2854	20 20.4	0.8354n	6.846		
18	9.8	0.1300	0.898	1.0066	3 39.2	1.2847	20 16.2	0.8403n	6.923		
19	9.9	0.1328	0.905	1.0071	3 38.2	1.2841	20 12.0	0.8449n	6.997		
20	9.9	0.1355	0.911	1.0076	3 37.3	1.2835	20 7.8	0.8494n	7.069		
21	10.0	0.1383	0.917	1.0081	3 36.4	1.2829	20 3.6	0.8536n	7.139		
22	10.1	0.1410	+0.923	1.0086	3 35.5	1.2824	19 59.4	0.8578n	-7.207		
23	10.1	0.1437	0.929	1.0092	3 34.7	1.2818	19 55.2	0.8617n	7.273		
24	10.2	0.1465	0.935	1.0098	3 33.8	1.2813	19 50.9	0.8655n	7.337		
25	10.2	0.1492	0.941	1.0103	3 32.9	1.2807	19 46.7	0.8691n	7.398		
26	10.3	0.1520	0.946	1.0109	3 32.1	1.2802	19 42.4	0.8726n	7.457		
27	10.4	0.1547	0.952	1.0114	3 31.3	1.2797	19 38.2	0.8758n	7.513		
28	10.4	0.1574	+0.958	1.0120	3 30.5	1.2792	19 33.9	0.8789n	-7.567		
29	10.5	0.1602	0.963	1.0126	3 29.7	1.2787	19 29.7	0.8819n	7.619		
März 1	10.6	0.1629	0.969	1.0132	3 28.9	1.2783	19 25.4	0.8847n	7.668		
2	10.6	0.1656	0.974	1.0138	3 28.2	1.2778	19 21.1	0.8873n	7.715		
3	10.7	0.1684	0.980	1.0144	3 27.5	1.2774	19 16.8	0.8898n	7.759		
4	10.8	0.1711	0.985	1.0151	3 26.8	1.2770	19 12.5	0.8922n	7.801		
5	10.8	0.1739	+0.990	1.0157	3 26.1	1.2767	19 8.2	0.8944n	-7.841		
6	10.9	0.1766	0.995	1.0164	3 25.4	1.2763	19 3.9	0.8964n	7.878		
7	11.0	0.1793	1.000	1.0171	3 24.8	1.2760	18 59.6	0.8983n	7.913		
8	11.0	0.1821	1.005	1.0177	3 24.1	1.2757	18 55.3	0.900In	7.945		
9	11.1	0.1848	1.010	1.0184	3 23.5	1.2754	18 50.9	0.9017n	7.975		
10	11.2	0.1875	1.015	1.0192	3 22.9	1.2751	18 46.6	0.9033n	8.003		
II	11.2	0.1903	+1.020	1.0199	3 22.3	1.2748	18 42.3	0.9047n	-8.029		
12	11.3	0.1930	1.025	1.0206	3 21.7	1.2746	18 38.0	0.9058n	8.051		
13	11.4	0.1958	1.030	1.0214	3 21.1	1.2744	18 33.6	0.9069n	8.071		
14	11.4	0.1985	1.035	1.0222	3 20.6	1.2742	18 29.3	0.9079n	8.089		
15	11.5	0.2012	1.040	1.0230	3 20.0	1.2741	18 24.9	0.9088n	8.105		
16	11.6	0.2040	1.045	1.0238	3 19.5	1.2740	18 20.6	0.9094n	8.118		
17	11.6	0.2067	+1.050	1.0247	3 19.0	1.2739	18 16.3	0.9100n	-8.128		
18	11.7	0.2094	1.055	1.0256	3 18.5	1.2738	18 12.0	0.9104n	8.136		
19	11.8	0.2122	1.059	1.0264	3 18.0	1.2737	18 7.6	0.9107n	8.142		
20	11.8	0.2149	1.064	1.0273	3 17.5	1.2737	18 3.3	0.9109n	8.145		
.21	11.9	0.2177	1.069	1.0282	3 17.0	1.2737	17 59.0	0.9109n	8.146		
22	12.0	0.2204	+1.074	1.0292	3 16.6	1.2737	17 54.6	0.9109n	-8.145		

					rio E. Lib	0h Wel	t-Zeit	t				
Tag	g	f'	g'	G'	Allgemeine Präzession seit 1940.0	Δψ	Δψ'	Mittlere Schiefe	Δε	Δε'	j	k
1940	0	in 0.001	in o.or				in 0.01	23° 26′		in o.or	in c	.001
Febr.	. 10	+ 6	+7	20.5	+ 5.43	+8.37	+10	49.47	-8.42	+5	44	85
	II	+ 2	7	18.7	5.57	8.35	+ 3	49.46	8.40	+7	44	85
	12	- 3	7	17.0	5.71	8.33	<b>—</b> 5	49.46	8.39	+7	44	85
	13	- 8	8	15.4	5.85	8.31	-12	49.46	8.37	+6	44	85
	14	-12	9	13.9	5.99	8.28	-19	49.46	8.35	+4	44	85
	15	-14	9	12.5	6.12	8.25	-23	49.46	8.34	+1	44	84
	16	-14	+9	11.2	+ 6.26	+8.22	-23	49.46	-8.32	-2	44	84
	17	12	9	10.0	6.40	8.19	-20	49.46	8.31	<b>—</b> 5	44	84
	18	<b>—</b> 8	9	8.6	6.54	8.16	-13	49.46	8.29	<b>—</b> 7	44	84
	19	- 3	8	6.9	6.67	8.12	- 4	49-45	8.28	-7	44	84
	20	+ 3	7	4.9	6.81	8.09	+ 5	49.45	8.27	6	44	84
	21	+ 7	6	2.3	6.95	8.05	+12	49-45	8.25	-3	44	84
	22	+10	+6	23.7	+ 7.09	+8.or	+16	49.45	-8.24	+1	44	84
	23	+ 9	7	21.7	7.22	7.97	+15	49.45	8.23	+4	45	83
	24	+ 6	8	20.0	7.36	7.93	+10	49.45	8.21	-+-7	45	83
	25	+ 2	8	18.5	7.50	7.89	+ 3	49.45	8.20	+8	45	83
	26	<b>—</b> 3	7	17.0	7.64	7.85	- 5	49.44	8.19	+7	45	83
	27	<b>—</b> 6	6	14.9	7.77	7.80	-10	49.44	8.18	+4	45	83
	28	- 7	+5	12.3	+ 7.91	+7.76	-12	49.44	-8.17	0	45	83
	29	- 6	5	9.4	8.05	7.71	-10	49.44	8.16	-3	45	83
März	1	- 3	6	7.1	8.19	7.66	- 5	49-44	8.15	<del>-6</del>	45	83
	2	+- 2	8	5.4	8.32	7.61	+ 3	49.44	8.14	-7	45	83
	3	+ 6	8	4.1	8.46	7.56	+10	49.44	8.13	<b>—</b> 7	45	83
	4	+10	9	2.8	8.60	7.51	+16	49-44	8.12	6	45	83
	5	+12	<del>+</del> 9	1.5	+ 8.74	+7.46	+20	49.43	-8.12	3	45	82
	6	+12	8	0.2	8.88	7.40	+20	49.43	8.11	o	45	82
	7	+11	8	22.7	9.01	7-35	+18	49-43	8.10	+3	45	82
	8	+ 8	7	21.1	9.15	7.30	-+13	49.43	8.10	+5	45	82
	9	+ 4	7	19.4	9.29	7.24	+ 6	49.43	8.09	+6	46	82
	10	— I	7	17.6	9.43	7.19	2	49.43	8.09	+7	46	82
	11	<b>- 6</b>	+7	16.0	+ 9.56	+7.13	<b>-</b> 9	49.43	-8.08	+6	46	82
	12	-10	8	14.4	9.70	7.07	-16	49.43	8.08	+5	46	82
	13	-13	8	12.9	9.84	7.02	21	49.42	8.08	+2	46	82
	14	-14	9	11.6	9.98	6.96	-22	49.42	8.08	—ı	46	82
	15	-13	9	10.4	10.11	6.90	-21	49.42	8.08	-4	46	82
	16	-10	9	9.0	10.25	6.84	— <b>1</b> 6	49.42	8.08	-6	46	82
	17	<b>-</b> 5	+-8	7.6	+10.39	+6.78	<b>—</b> 8	49.42	-8.08	-7	46	82
	18	0	7	5.9	10.53	6.72	0	49.42	8.08	-7	46	82
	19	+ 5	5	3.6	10.66	6.66	+ 8	49.42	8.08	<u>-4</u>	46	82
	20	+ 8	5	0.8	10.80	6.61	+13	49.42	8.08	-r	46	82
	21	+ 8	6	22.2	10.94	6.55	+14	49.41	8.08	+3	47	82
	22	+ 6	+7	20.2	+11.08	+6.49	+10	49.41	-8.09	+6	47	

				0 h	Welt-Z	eit			
Tag	Stern- zeit Greenw.	t	f	$\log g$	G	log h	H	log i	i
1940									
März 22	h 12.0	a 0.2204	+1.074	1.0292	3 16.6	1.2737	17 54.6	0.9109n	-8.145
23	12.0	0.2231	1.079	1.0301	3 16.1	1.2737	17 50.3	0.9109n	8.140
24	12.1	0.2259	1.083	1.0311	3 15.7	1.2738	17 46.0	0.9103n	8.133
25	12.2	0.2286	1.088	1.0321	3 15.2	1.2739	17 41.7	0.9098n	8.124
26	12.2	0.2313	1.093	1.0331	3 14.8	1.2740	17 37.4	0.909In	8.112
27	12.3	0.2341	1.098	1.0341	3 14.4	1.2741	17 33.1	0.9084n	8.098
28	12.4	0.2368	+1.102	1.0352	3 14.0	1.2743	17 28.8	0.9075n	-8.082
29	12.4	0.2396	1.107	1.0363	3 13.6	1.2745	17 24.5	0.9065n	8.063
30	12.5	0.2423	1.112	1.0375	3 13.2	1.2747	17 20.2	0.9054n	8.042
31	12.5	0.2450	1.117	1.0386	3 12.9	1.2749	17 15.9	0.904In	8.019
April	12.6	0.2478	1.122	1.0397	3 12.5	1.2752	17 11.6	0.9027n	7.993
2	12.7	0.2505	1.127	1.0409	3 12.2	1.2755	17 7.3	0.90IIn	7.964
3	12.7	0.2533	+1.132	1.0421	3 11.8	1.2758	17 3.1	0.8995n	-7.934
4	12.8	0.2560	1.137	1.0433	3 11.5	1.2761	16 58.8	0.8977n	7.901
5	12.9	0.2587	1.142	1.0445	3 11.1	1.2764	16 54.6	0.8958n	7.866
6	12.9	0.2615	1.148	1.0458	3 10.8	1.2768	16 50.4	0.8937n	7.828
7	13.0	0.2642	1.153	1.0471	3 10.5	1.2772	16 46.1	0.8914n	7.788
8	13.1	0.2669	1.158	1.0484	3 10.1	1.2776	16 41.9	0.8891n	7.746
9	13.1	0.2697	+1.163	1.0497	3 9.8	1.2780	16 37.7	0.8866n	7.702
10	13.2	0.2724	1.169	1.0511	3 9.5	1.2784	16 33.5	0.8839n	7.655
11	13.3	0.2752	1.174	1.0524	3 9.2	1.2788	16 29.3	0.8812n	7.606
12	13.3	0.2779	1.180	1.0538	3 8.9	1.2793	16 25.2	0.8782n	7.555
13	13.4	0.2806	1.185	1.0552	3 8.5	1.2798	16 21.0	0.8752n	7.502
14	13.5	0.2834	1.191	1.0567	3 8.2	1.2803	16 16.9	0.8720n	7.447
15	13.5	0.2861	+1.196	1.0581	3 7.9	1.2808	16 12.7	0.8686n	-7.390
16	13.6	0.2888	1.202	1.0596	3 7.6	1.2813	16 8.6	0.8651n	7.330
17	13.7	0.2916	1.208	1.0611	3 7.3	1.2818	16 4.5	0.8615n	7.269
18	13.7	0.2943	1.214	1.0626	3 7.0	1.2824	16 0.4	0.8576n	7.205
19	13.8	0.2971	1.220	1.0641	3 6.7	1.2830	15 56.3	0.8536n	7.139
20	13.9	0.2998	1.226	1.0656	3 6.4	1.2835	15 52.3	0.8495n	7.071
21	13.9	0.3025	+1.232	1.0672	3 6.1	1.2841	15 48.2	0.8452n	-7.001
22	14.0	0.3053	1.238	1.0687	3 5.8	1.2847	15 44.1	0.8407n	6.929
23	14.1	0.3080	1.245	1.0703	3 5.5	1.2853	15 40.1	0.8361n	6.856
24	14.1	0.3107	1.251	1.0719	3 5.2	1.2859	15 36.1	0.8312n	6.780
25	14.2	0.3135	1.257	1.0735	3 4.8	1.2865	15 32.1	0.8262n	6.702
26	14.3	0.3162	1.264	1.0751	3 4.5	1.2871	15 28.1	0.8211n	6.623
27	14.3	0.3190	+1.271	1.0768	3 4.2	1.2877	15 24.1	0.8156n	-6.541
28		0.3217	1.277	1.0785	3 3.9	1.2883	15 20.1	0.8100n	6.457
29	14.5	0.3244	1.284	1.0801	3 3.6	1.2890	15 16.2	0.8043n	6.372
30	14.5	0.3272	1.291	1.0818	3 3.2	1.2896	15 12.2	0.7984n	6.286
Mai 1	14.6	0.3299	1.298	1.0835	3 2.9	1.2902	15 8.3	0.7922n	6.197
2	14.7	0.3327	+1.305	1.0852	3 2.6	1.2909	15 4.4	0.7858n	-6.107

				115341	0h Welt	t-Zeit	5				
Tag	f'	g'	G'	Allgemeine Präzession seit 1940.0	Δψ	$\Delta \psi'$	Mittlere Schiefe	Δε	Δε'	j	k
1940	in 0,001	in o.or				in o.or	23°26′		în o.oı	in o	.001
März 22	+ 6	+7	20.2	+11.08	-+6.49	+10	49.41	-8.09	+-6	47	82
2		8	18.7	11.21	6.43	+ 4	49.41	8.09	+-8	47	82
24		8	17.2	11.35	6.37	- 4	49.41	8.10	+7	47	82
25	-6	7	15.6	11.49	6.31	-10	49.41	8.10	+5	47	82
26		6	13.3	11.63	6.25	-13	49.41	8.11	+2	47	82
27	7 - 8	5	10.6	11.77	6.19	-12	49.41	8.11	-2	47	82
28	-5	+6	7.9	+11.90	+6.13	- 7	49.40	-8.12	<u>-5</u>	47	82
20		7	6.0	12.04	6.08	0	49.40	8.13	7	47	82
30	+ 5	8	4.4	12.18	6.02	+ 9	49.40	8.14	-8	48	82
31	+10	9	3.1	12.32	5.96	+16	49.40	8.15	<b>—</b> 7	48	82
April	+12	9	1.8	12.45	5.90	+20	49.40	8.16	-4	48	82
2	+13	9	0.6	12.59	5.85	+22	49.40	8.17	-ı	48	82
3	+12	+-8	23.1	+12.73	+5.79	+20	49.40	-8.18	+2	48	82
2		8	21.6	12.87	5.74	+15	49.40	8.19	+4	48	82
	+ 5	7	20.0	13.00	5.69	+ 9	49.39	8.20	+6	48	83
$\epsilon$	+ 1	7	18.3	13.14	5.63	+ 1	49.39	8.22	<b>+7</b>	49	83
7	- 4	7	16.5	13.28	5.58	<b>—</b> 6	49.39	8.23	+6	49	83
8	3 - 8	7	14.8	13.42	5.53	-r3	49.39	8.24	+5	49	83
9	-11	+8	13.4	+13.55	+5.48	—18	49.39	-8.26	+3	49	83
10	-13	8	12.0	13.69	5.43	-21	49.39	8.27	0	49	83
11	-12	8	10.6	13.83	5.38	-20	49.39	8.29	3	49	83
12	-10	8	9.3	13.97	5.33	-16	49-39	8.30	<b>—</b> 5	49	83
13	- 6	8	8.0	14.11	5.28	-10	49.38	8.32	<b>—</b> 7	50	83
14	- I	7	6.4	14.25	5.24	- 2	49.38	8.34	-7	50	83
15	5 + 4	+6	4.4	+14.38	+5.19	+ 6	49.38	-8.35	<u>-5</u>	50	83
16	5 + 7	5	1.7	14.52	5.15	+11	49.38	8.37	-2	50	83
17	+ 8	5	22.9	14.66	5.11	+13	49.38	8.39	+2	50	84
18	+ 6	6	20.7	14.80	5.07	+11	49.38	8.41	+5	50	84
19	+ 3	7	19.0	14.93	5.03	+ 5	49.38	8.43	+7	51	84
20	- 2	8	17.4	15.07	4.99	<b>-</b> 3	49.38	8.45	+8	51	84
21	- 6	+7	15.9	+15.21	+4.95	-10	49.37	-8.47	+6	51	84
22	- 9	7	14.1	15.35	4.92	-14	49.37	8.49	+3	51	84
23	-9	6	11.7	15.48	4.88	-15	49.37	8.51	0	51	84
24	1 - 7	6	9.3	15.62	4.85	-11	49.37	8.53	<u>-4</u>	52	84
2		7	7.0	15.76	4.82	- 4	49.37	8.55	<b>—7</b>	52	84
20	+ 3	8	5.1	15.90	4.79	+ 5	49.37	8.57	<b>−</b> 7	52	85
2'	7 + 8	+-9	3.7	+16.03	+4.76	+13	49.37	-8.59	-7	52	85
28		9	2.3	16.17	4.73	+19	49.37	8.61	<b>-</b> 5	52	85
29		9	1.0	16.31	4.70	+22	49.36	8.63	-2	53	85
30	+13	9	23.7	16.45	4.68	+22	49.36	8.65	+1	53	85
Mai	11	8	22.2	16.58	4.65	+18	49.36	8.67	+4	53	85
	2 + 7	+-7	20.7	+16.72	+4.63	+12	49.36	-8.70	+6	53	85

Q\* 40

				116	Он 7	Welt-Z	eit	-		•
Tag	Š	Stern- zeit Greenw.	t	f	$\log g$	G	log h	Н	log i	i
1940	<b>-</b> -									
Mai	2	ь 14.7	0.3327	+1.305	1.0852	3 2.6	1.2909	h m	0.7858n	-6.107
mai		14.7	0.3354	1.312	1.0869	3 2.6	1.2909	15 4.4 15 0.5	0.7050n $0.7792n$	6.015
	3	14.8	0.3381	1.319	1.0886	3 1.9	1.2921	14 56.6	0.7792n $0.7724n$	5.921
	5	14.8	0.3409	1.326	1.0003	3 1.5	1.2928	14 52.8	0.7653n	5.82
	6	14.9	0.3436	1.334	1.0920	3 1.2	1.2934	14 48.9	0.7580n	5.728
	7	15.0	0.3463	1.341	1.0937	3 0.8	1.2940	14 45.0	0.7505n	5.630
	8	15.0	0.3491	+1.349	1.0955	3 0.4	1.2947	14 41.2	0.7427n	-5.530
	9	15.1	0.3518	1.356	1.0973	3 0.1	1.2953	14 37.4	0.7346n	5.428
	10	15.2	0.3546	1.364	1.0990	2 59.7	1.2959	14 33.6	0.7262n	5.324
	11	15.2	0.3573	1.372	1.1008	2 59.3	1.2965	14 29.8	0.7177n	5.220
	12	15.3	0.3600	1.380	1.1025	2 58.9	1.2971	14 26.0	0.7088n	5.114
	13	15.4	0.3628	1.388	1.1043	2 58.5	1.2977	14 22.2	0.6995n	5.006
	14	15.4	0.3655	+1.396	1.1061	2 58.1	1.2983	14 18.5	0.6900n	-4.898
	15	15.5	0.3682	1.404	1.1079	2 57.7	1.2989	14 14.7	0.6802n	4.788
	16	15.6	0.3710	1.412	1.1096	2 57.3	1.2995	14 11.0	0.6699n	4.676
	17	15.6	0.3737	1.421	1.1114	2 56.9	1.3000	14 7.3	0.6593n	4.563
	18	15.7	0.3765	1.429	1.1132	2 56.5	1.3006	14 3.5	0.6483n	4.449
	19	15.8	0.3792	1.438	1.1150	2 56.1	1.3012	13 59.8	0.6369n	4.334
	20	15.8	0.3819	+1.446	1.1167	2 55.6	1.3017	13 56.1	0.6251n	-4.218
	21	15.9	0.3847	1.455	1.1185	2 55.2	1.3022	13 52.5	0.6128n	4.100
	22	16.0	0.3874	1.463	1.1203	2 54.7	1.3028	13 48.8	$0.600c_n$	3.981
	23	16.0	0.3901	1.472	1.1221	2 54.3	1.3033	13 45.1	0.5867n	3.861
	24	16.1	0.3929	1.481	1.1238	2 53.8	1.3038	13 41.5	0.5730n	3.741
	25	16.2	0.3956	1.490	1.1256	2 53.4	1.3042	13 37.8	0.5586n	3.619
	26	16.2	0.3984	+1.499	1.1274	2 52.9	1.3047	13 34.2	0.5436n	-3.496
	27	16.3	0.4011	1.508	1.1291	2 52.4	1.3051	13 30.6	0.5279n	3.372
	28	16.4	0.4038	1.517	1.1309	2 51.9	1.3056	13 27.0	0.5116n	3.248
	29	16.4	0.4066	1.526	1.1326	2 51.4	1.3060	13 23.4	0.4944n	3.122
	30	16.5	0.4093	1.535	1.1344	2 50.9	1.3064	13 19.8	0.4765n	2.996
	31	16.6	0.4121	1.545	1.1361	2 50.4	1.3068	13 16.2	0.4577n	2.869
Juni	1	16.6	0.4148	+1.554	1.1379	2 49.9	1.3072	13 12.6	0.4379n	-2.741
	2	16.7	0.4175	1.563	1.1396	2 49.4	1.3076	13 9.0	0.4170n	2.612
	3	16.8	0.4203	1.573	1.1413	2 48.9	1.3079	13 5.4	0.3950n	2.483
	4	16.8	0.4230	1.582	1.1430	2 48.4	1.3082	13 1.9	0.3716n	2.353
	5	16.9	0.4257	1.592	1.1447	2 47.8	1.3085	12 58.3	0.3469n	2.223
	6	17.0	0.4285	1.601	1.1464	2 47.3	1.3088	12 54.8	0.3204n	2.091
	7	17.0	0.4312	+1.611	1.1481	2 46.8	1.3091	12 51.2	0.2920n	-1.959
	8	17.1	0.4340	1.620	1.1498	2 46.2	1.3094	12 47.7	0.2617n	1.827
	9	17.1	0.4367	1.630	1.1514	2 45.7	1.3096	12 44.2	0.2292n	1.695
	10	17.2	0.4394	1.640	1.1531	2 45.1	1.3098	12 40.6	0.1934n	1.561
	11	17.3	0.4422	1.650	1.1547	2 44.5	1.3100	12 37.1	0.1547n	1.428
	12	17.3	0.4449	+1.659	1.1564	2 44.0	1.3102	12 33.6	0.1119n	-1.294

			_		th Kalls	Oh Wel	t-Zei1	t				
Ta	g	f'	g'	G'	Allgemeine Präzession seit 1940.0	Δψ	Δψ'	Mittlere Schiefe	Δε	Δε <b>'</b>	j	k
194	ļo	in 0.001	in o.or				in o.or	23° 26′		in o.or	in o	.001
Mai	2	+ 7	+7	20.7	+16.72	+4.63	+12	49.36	-8.70	+6	53	85
	3	+ 3	7	19.0	16.86	4.61	+ 4	49.36	8.72	+7	53	85
	4	<b>—</b> 2	7	17.2	17.00	4.59	- 4	49.36	8.74	+7	54	86
	5	<b>-</b> 6	7	15.5	17.13	4.57	-11	49.36	8.76	+5	54	86
	6	—10	7	13.8	17.27	4.55	—r6	49-35	8.78	+3	54	86
	7	-12	8	12.3	17.41	4.54	-19	49-35	8.80	$+\mathbf{I}$	54	86
	8	-12	+8	10.9	+17.55	+4.52	-19	49.35	-8.83	-2	54	86
	9	-10	8	9.5	17.68	4.51	-16	49.35	8.85	-5	55	86
	10	<b>—</b> 6	8	8.2	17.82	4.50	-10	49.35	8.87	<b>—</b> 7	55	86
	11	<b>—</b> 2	7	6.6	17.96	4.49	<b>—</b> 3	49.35	8.89	<b>—</b> 7	55	86
	12	+ 3	6	4.8	18.10	4.48	+ 5	49.35	8.91	6	55	86
	13	+ 6	5	2.5	18.23	4.47	+11	49.35	8.93	-3	56	87
	14	+ 8	+5	23.9	+18.37	+4.47	+13	49.34	-8.95	٥	56	87
	15	+ 7	6	21.5	18.51	4.46	+12	49.34	8.97	+4	56	87
	16	+ 4	7	19.6	18.65	4.46	+ 7	49.34	8.99	+-6	56	87
	17	0	8	17.9	18.78	4.46	0	49.34	9.01	+-8	56	87
	18	— <sub>5</sub>	8	16.4	18.92	4.46	<b>—</b> 8	49.34	9.03	+7	57	87
	19	— 8	7	14.6	19.06	4.46	-14	49.34	9.05	+4	57	87
	20	-10	+7	12.6	+19.20	+4.46	-16	49.34	-9.07	+1	57	87
	21	<b>-</b> 9	6	10.3	19.34	4.46	-14	49-34	9.09	-3	57	87
	22	<b>—</b> 5	7	8.1	19.47	4.47	<b>-</b> 9	49-33	9.11	<u>-6</u>	58	88
	23	0	7	6.1	19.61	4.47	0	49.33	9.13	-7	58	88
	24	+ 5	8	4.4	19.75	4.48	+ 8	49-33	9.15	<b>—</b> 7	58	88
	25	+10	9	2.9	19.89	4.49	+16	49.33	9.16	<del>-6</del>	58	88
	26	+13	+9	1.6	+20.02	+4.50	+21	49.33	-9.18	<b>-4</b>	59	88
	27	+13	9	0.2	20.16	4.51	+22	49.33	9.20	0	59	88
	28	+12	8	22.7	20.30	4.52	+20	49-33	9.21	+3	59	88
	29	+ 9	8	21.2	20.44	4.53	+14	49.33	9.23	+5	59	88
	30	+ 4	7	19.5	20.57	4.54	+ 7	49.32	9.24	+7	59	88
	31	— I	7	17.7	20.71	4.56	— I	49.32	9.26	+7	60	88
Juni	1	— <sub>5</sub>	+7	16.0	+20.85	+4.57	<b>-</b> 9	49.32	-9.27	+-6	60	89
	2	<b>-</b> 9	7	14.4	20.99	4.59	-15	49.32	9.29	+4	60	89
	3	-11	8	12.8	21.12	4.60	-19	49.32	9.30	+2	60	89
	4	-12	8	11.3	21.26	4.62	-20	49.32	9.32	- <b>1</b>	61	89
	5	-11	8	9.9	21.40	4.64	-17	49.32	9.33	-4	61	89
	6	<b>—</b> 7	8	8.4	21.54	4.66	-12	49.32	9.34	-6	61	89
	7	- 3	+7	6.9	+21.67	+4.68	<b>-</b> 4	49.31	<b>−9.35</b>	<b>-7</b>	61	89
	8	+ 2	6	5.2	21.81	4.70	+ 4	49.31	9.36	6	62	89
	9	+ 6	6	3.0	21.95	4.72	+10	49.31	9.37	-4	62	89
	10	+ 9	6	0.5	22.09	4.74	+14	49.31	9.38	1	62	89
	II	+ 9	6	22.3	22.23	4.76	+14	49.31	9.39	+3	62	89
	12	+ 6	+7	20.3	+22.36	+4.78 l	+10	49.31	-9.40	-+6	63	89

				Ол	Welt-Z	eit			
Tag	Stern- zeit Greenw.	t	f	$\log g$	G	$\log h$	H	$\log i$	i
1940									
Juni 12	17.3	0.4449	+1.659	1.1564	h m 2 44.0	1.3102	12 33.6	0.1119n	-1.29
13		0.4476	1.669	1.1580	2 43.4	1.3104	12 30.1	0.0645n	1.16
14		0.4504	1.679	1.1596	2 42.8	1.3106	12 26.5	0.0107n	1.02
15		0.4531	1.689	1.1612	2 42.2	1.3107	12 23.0	9.9494n	0.89
16	1 .	0.4559	1.699	1.1628	2 41.7	1.3108	12 19.5	9.8779n	0.75
17		0.4586	1.709	1.1644	2 41.1	1.3109	12 16.0	9.7924n	0.62
18		0.4613	+1.718	1.1659	2 40.5	1.3110	12 12.5.	9.6857n	<b>-0.4</b> 8
19	1 ' .	0.4641	1.728	1.1675	2 39.9	1.3110	12 9.0	9.5428n	0.34
20		0.4668	1.738	1.1690	2 39.3	1.3111	12 5.5	9.3284n	0.21
21	1	0.4695	1.748	1.1705	2 38.7	1.3111	12 2.0	8.8921n	-0.07
22		0.4723	1.758	1.1720	2 38.1	1.3111	11 58.5	8.7634	+0.058
23		0.4750	1.768	1.1735	2 37.5	1.3111	11 55.0	9.2878	0.19
24		0.4778	+1.778	1.1750	2 36.9	1.3111	11 51.5	9.5172	+0.320
25		0.4805	1.788	1.1764	2 36.3	1.3110	11 48.0	9.6665	0.46
<b>2</b> 6		0.4832	1.797	1.1779	2 35.7	1.3109	11 44.5	9.7774	0.59
27	18.3	0.4860	1.807	1.1793	2 35.0	1.3108	11 41.0	9.8657	0.73.
28	_	0.4887	1.817	1.1807	2 34.4	1.3107	11 37.5	9.9390	0.86
29		0.4915	1.827	1.1821	2 33.8	1.3106	11 34.0	0.0017	1.00
30	18.5	0.4942	+1.837	1.1835	2 33.2	1.3105	11 30.5	0.0565	+1.130
Juli r		0.4969	1.847	1.1849	2 32.5	1.3103	11 27.0	0.1048	1.27
2	1 .	0.4997	1.856	1.1863	2 31.9	1.3101	11 23.5	0.1480	1.40
3		0.5024	1.866	1.1876	2 31.3	1.3099	11 19.9	0.1872	1.53
4	0.0	0.5051	1.876	1.1890	2 30.7	1.3097	11 16.4	0.2232	1.67
5	_	0.5079	1.886	1.1903	2 30.0	1.3094	11 12.9	0.2565	1.80
6	18.9	0.5106	+1.895	1.1916	2 29.4	1.3092	11 9.4	0.2871	+1.93
7	_	0.5134	1.905	1.1929	2 28.8	1.3089	11 5.8	0.3156	2.06
8		0.5161	1.914	1.1941	2 28.1	1.3086	11 2.3	0.3422	2.19
9	_	0.5188	1.924	1.1954	2 27.5	1.3083	10 58.8	0.3674	2.33
10		0.5216	1.933	1.1966	2 26.9	1.3080	10 55.2	0.3908	2.45
11	19.3	0.5243	1.943	1.1978	2 26.2	1.3076	10 51.7	0.4130	2.58
12	19.3	0.5270	+1.952	1.1990	2 25.6	1.3073	10 48.1	0.4339	+2.71
13		0.5298	1.961	1.2002	2 25.0	1.3069	10 44.5	0.4538	2.84
14		0.5325	1.970	1.2013	2 24.4	1.3065	10 40.9	0.4728	2.97
15	19.5	0.5353	1.980	1.2025	2 23.7	1.3061	10 37.3	0.4908	3.09
16		0.5380	1.989	1.2036	2 23.1	1.3057	10 33.8	0.5080	3.22
17		0.5407	1.998	1.2047	2 22.5	1.3052	10 30.2	0.5244	3.34
18	19.7	0.5435	+2.007	1.2058	2 21.9	1.3048	10 26.6	0.5401	+3.46
19	19.8	0.5462	2.016	1.2069	2 21.2	1.3043	10 23.0	0.5552	3.59
20		0.5489	2.025	1.2080	2 20.6	1.3039	10 19.4	0.5696	3.71
21	19.9	0.5517	2.033	1.2091	2 20.0	1.3034	10 15.7	0.5834	3.83
22	20.0	0.5544	2.042	1.2102	2 19.4	1.3029	10 12.1	0.5967	3.95
23	20.0	0.5572	+2.051	1.2113	2 18.8	1.3024	10 8.5	0.6096	+4.070

					1-2-F3	Oh Wel	t-Zei	t	7			
Та	g	f'	g'	G'	Allgemeine Präzession seit 1940.0	Δψ	Δψ'	Mittlere Schiefe	Δε	Δε'	j	k
194	10	in o.ooı	in o.or				in o.or	23° 26′		in o.or	in o	.001
Juni	12	+ 6	+7	20.3	+22.36	+4.78	+10	49.31	-9.40	+6	63	89
	13	+ 2	7	18.7	22.50	4.80	+ 3	49.31	9.41	+7	63	89
	14	- 3	7	17.0	22.64	4.83	- 5	49.30	9.42	-+-7	63	89
	15	- 7	7	15.3	22.78	4.85	-11	49.30	9.42	+5	63	89
	16	<b>-</b> 9	6	13.3	22.91	4.87	15	49.30	9.43	+2	63	89
	17	<b>—</b> 9	6	11.0	23.05	4.90	-15	49.30	9.43	-2	64	89
	18	<b>—</b> 7	+6	8.9	+23.19	+4.92	-11	49.30	<b>−9.44</b>	<b>-</b> 5	64	89
	19	— ·	7	6.9	23.33	4.95	- 4	49.30	9.44	-7	64	89
	20	+ 3	8	5.1	23.46	4.97	+ 4	49.30	9.45	<u>-8</u>	64	89
	21	+ 7	8	3.6	23.60	4.99	+12	49.30	9.45	一7	65	89
	22	+11	8	2.1	23.74	5.02	+18	49.29	9.45	4	65	89
	23	+13	8	0.6	23.88	5.04	+21	49.29	9.46	-I	65	89
	24	+12	-+-8	23.2	+24.01	±5.07	+20	49.29	-9.46	+2	65	89
	25	+10	8	21.7	24.15	5.09	+16	49.29	9.46	+4	65	89
	26	+ 6	7	20.1	24.29	5.12	+ 9	49.29	9.46	+6	66	89
	27	+ I	7	18.3	24.43	5.14	+ I	49.29	9.46	+7	66	89
	28	- 4	7	16.5	24.56	5.16	<b>—</b> 7	49.29	9.46	+6	66	89
	29	<b>—</b> 8	7	14.8	24.70	5.19	-14	49.29	9.46	+5	66	89
	30	-11	+8	13.3	+24.84	+5.21	-19	49.28	-9.45	+3	67	89
Juli	I	-13	8	11.8	24.98	5.23	-21	49.28	9.45	0	67	89
	2	-12	8	10.4	25.12	5.25	-20	49.28	9.45	-3	67	89
	3	<b>-</b> 9	8	9.0	25.25	5.27	-15	49.28	9.44	-6	67	89
	4	<b>—</b> 4	8	7.4	25.39	5.29	<b>一</b> 7	49.28	9.44	<b>—</b> 7	67	89
	5	-+- I	7	5.7	25.53	5.31	+ 1	49.28	9.43	-7	68	89
	6	+ 5	+6	3.6	+25.67	+5.33	+ 9	49.28	<b>-9.43</b>	<b>-</b> 5	68	89
	7	+ 9	6	1.3	25.80	5.35	+14	49.28	9.42	-2	68	89
	8	+10	6	23.1	25.94	5.37	+16	49.27	9.41	+2	68	89
	9	+- 8	7	21.1	26.08	5.39	+13	49.27	9.41	+-5	68	89
	10	+ 4	7	19.4	26.22	5.41	+ 7	49.27	9.40	+7	69	89
	II	— I	7	17.8	26.35	5.42	_ I	49.27	9.39	+7	69	89
	12	— <sub>5</sub>	+7	16.1	+-26.49	+5.44	<b>—</b> 8	49.27	-9.38	+-6	69	88
	13	<b>–</b> 8	6	14.1	26.63	5.45	-13	49.27	9.37	+3	69	88
	14	- 9	6	11.8	26.77	5.46	-15	49.27	9.36	0	69	88
	15	<b>—</b> 7	6	9.5	26.91	5.48	-12	49.27	9.35	-4	70	88
	16	<b>—</b> 4	7	7.4	27.04	5.49	<b>–</b> 6	49.26	9.34	6	70	88
	17	+ 1	7	5.6	27.18	5.50	+ 2	49.26	9.33	<del>-7</del>	70	88
	18	+ 6	+8	4.0	+27.32	+5.51	+10	49.26	-9.32	<b>−</b> 7	70	88
	19	+10	8	2.5	27.46	5.52	+16	49.26	9.31	<u>-5</u>	70	88
	20	+12	8	1.1	27.59	5.52	+19	49.26	9.30	-2	70	88
	21	+12	8	23.7	27.73	5.53	+20	49.26	9.28	<b>+1</b>	71	88
	22	+10	7	22.2	27.87	5.53	+ <b>1</b> 7	49.26	9.27	+3	71	88
	23	+ 7	+7	20.6	+28.01	+5.54	- <del> -</del> 11	49.25	-9.26	+5	71	88

				110	Oh 7	Welt-Z	eit			
Та	g	Stern- zeit Greenw.	t	f	log g	G	log h	Н	$\log i$	i
194	ļο									
Juli	23	h 20.0	0.5572	+2.051	1.2113	2 18.8	1.3024	10 8.5	0.6096	+4.070
	24	20.1	0.5599	2.059	1.2123	2 18.2	1.3018	10 4.8	0.6219	4.187
	25	20.2	0.5626	2.068	1.2133	2 17.6	1.3013	10 1.2	0.6337	4.302
	26	20.2	0.5654	2.076	1.2143	2 17.0	1.3008	9 57.5	0.6451	4.417
	27	20.3	0.5681	2.085	1.2153	2 16.4	1.3002	9 53.8	0.6561	4.530
	28	20.4	0.5709	2.093	1.2162	2 15.8	1.2997	9 50.1	0.6668	4.643
	29	20.4	0.5736	+2.101	1.2172	2 15.2	1.2991	9 46.4	0.6771	+4.754
	30	20.5	0.5763	2.109	1.2181	2 14.6	1.2985	9 42.7	0.6869	4.863
	31	20.6	0.5791	2.117	1.2190	2 14.0	1.2979	9 39.0	0.6965	4.972
Aug.	I	20.6	0.5818	2.125	1.2199	2 13.5	1.2973	9 35.2	0.7058	5.079
	2	20.7	0.5845	2.133	1.2208	2 12.9	1.2967	9 31.5	0.7147	5.184
	3	20.8	0.5873	2.141	1.2217	2 12.3	1.2961	9 27.7	0.7234	5.289
	4	20.8	0.5900	+2.149	1.2226	2 11.8	1.2955	9 23.9	0.7317	+5.392
	5	20.9	0.5928	2.156	1.2234	2 11.2	1.2949	9 20.2	0.7398	5.493
	6	21.0	0.5955	2.164	1.2243	2 10.7	1.2943	9 16.4	0.7476	5.592
	7	21.0	0.5982	2.171	1.2251	2 10.1	1.2937	9 12.6	0.7552	5.691
	8	21.1	0.6010	2.179	1.2260	2 9.6	1.2930	9 8.7	0.7625	5.788
	9	21.2	0.6037	2.186	1.2268	2 9.0	1.2924	9 4.9	0.7696	5.883
	10	21.2	0.6064	+2.193	1.2276	2 8.5	1.2918	9 1.1	0.7764	+5.976
	II	21.3	0.6092	2.200	1.2283	2 8.0	1.2911	8 57.2	0.7830	6.068
	12	21.4	0.6119	2.207	1.2291	2 7.5	1.2905	8 53.4	0.7894	6.158
	13	21.4	0.6147	2.214	1.2299	2 7.0	1.2899	8 49.5	0.7957	6.247
	14	21.5	0.6174	2.221	1.2307	2 6.5	1.2893	8 45.6	0.8017	6.334
	15	21.6	0.6201	2.228	1.2314	2 6.0	1.2886	8 41.7	0.8075	6.419
	16	21.6	0.6229	+2.234	1.2321	2 5.5	1.2880	8 37.8	0.8130	+6.502
	17	21.7	0.6256	2.241	1.2329	2 5.0	1.2874	8 33.8	0.8184	6.583
	18	21.7	0.6283	2.247	1.2336	2 4.5	1.2868	8 29.9	0.8237	6.663
	19	21.8	0.6311	2.254	1.2343	2 4.1	1.2862	8 25.9	0.8287	6.740
	20	21.9	0.6338	2.260	1.2350	2 3.6	1.2856	8 22.0	0.8335	6.816
	21	21.9	0.6366	2.267	1.2357	2 3.1	1.2850	8 18.0	0.8382	6.890
	22	22.0	0.6393	+2.273	1.2364	2 2.7	1.2844	8 14.0	0.8427	+6.962
	23	22.I	0.6420	2.279	1.2370	2 2.3	1.2838	8 10.0	0.8471	7.032
	24	22.1	0.6448	2.285	1.2377	2 1.9	1.2833	8 6.0	0.8513	7.101
	25	22.2	0.6475	2.291	1.2384	2 1.4	1.2827	8 1.9	0.8553	7.167
	26	22.3	0.6502	2.297	1.2391	2 1.0	1.2822	7 57.9	0.8592	7.231
	27	22.3	0.6530	2.303	1.2397	2 0.6	1.2816	7 53.8	0.8629	7.293
	28	22.4	0.6557	+2.308	1.2404	2 0.2	1.2811	7 49.8	0.8665	+7.353
	29	22.5	0.6585	2.314	1.2410	1 59.8	1.2806	7 45.7	0.8699	7.411
	30	22.5	0.6612	2.320	1.2417	1 59.5	1.2801	7 41.6	0.8731	7.467
	31	22.6	0.6639	2.325	1.2423	1 59.1	1.2796	7 37.5	0.8763	7.521
Sept	. I	22.7	0.6667	2.331	1.2429	1 58.7	1.2791	7 33.4	0.8793	7.573
	2	22.7	0.6694	+2.336	1.2436	1 58.4	1.2787	7 29.3	0.8821	+7.623

					17-7-11-	Oh Welt	t-Zeit	t				
Та	g	f'	g'	G'	Allgemeine Präzession seit 1940.0	Δψ	Δψ'	Mittlere Schiefe	Δε	Δε'	j	k
194	.0	in o.com	in o.or				in o.or	23°26′		in o.or	in o	100.
Juli	23	+ 7	+7	20.6	+28.or	+5.54	+rr	49.25	-9.26	+5	71	88
	24	+ 2	7	18.9	28.14	5.54	+ 4	49.25	9.24	+7	71	87
	25	<b>—</b> 3	7	17.1	28.28	5.54	<b>-</b> 4	49.25	9.23	-+-7	71	87
	26	<b>—</b> 7	7	15.3	28.42	5.54	12	49.25	9.21	+6	71	87
	27	-11	8	13.7	28.56	5.54	-18	49.25	9.20	+3	72	87
	28	-13	8	12.3	28.69	5.54	-21	49.25	9.18	+1	72	87
	29	-13	+9	10.9	+28.83	+5.53	-21	49.25	-9.17	-2	72	87
	30	-11	9	9.6	28.97	5.53	-18	49.25	9.15	<b>—</b> 5	72	87
	31	<b>—</b> 7	8	8.2	29.11	5.52	11	49.24	9.14	<b>—</b> 7	72	87
Aug.	I	— 2	7	6.6	29.24	5.52	— 3	49.24	9.12	<b>—</b> 7	72	87
	2	+ 3	6	4.7	29.38	5.51	+ 5	49.24	9.11	6	73	86
	3	+ 7	6	2.3	29.52	5.50	+12	49.24	9.09	-3	73	86
	4	+ 9	+6	23.7	+29.66	+5.49	+15	49.24	-9.08	0	73	86
	5	+ 9	7	21.7	29.80	5.47	+14	49.24	9.06	+4	73	86
	6	+ 6	8	20.1	29.93	5.46	+10	49.24	9.04	+7	73	86
	7	+ 2	8	18.5	30.07	5.44	+ 3	49.24	9.03	+8	73	86
	8	- 3	7	16.9	30.21	5.43	<b>—</b> 5	49.23	9.01	-+-7	73	86
	9	<b>—</b> 7	6	15.0	30.35	5.41	-11	49.23	8.99	+5	74	86
	10	- 8	+5	12.7	+30.48	+5.39	-13	49.23	-8.98	+1	74	85
	II	<b>—</b> 7	5	9.9	30.62	5.37	-12	49.23	8.96	-3	74	85
	12	- 4	6	7.7	30.76	5.34	<b>—</b> 7	49.23	8.95	-6	74	85
	13	+ I	7	5.8	30.90	5.32	+ 1	49.23	8.93	<b>—</b> 7	74	85
	14	+ 5	8	4.3	31.03	5.29	+ 9	49.23	8.91	7	74	85
	15	+ 9	8	2.9	31.17	5.27	+15	49.23	8.90	<del>-6</del>	74	85
	16	+12	+8	1.6	+31.31	+5.24	+19	49.22	-8.88	3	74	85
	17	+12	8	0.2	31.45	5.21	+20	49.22	8.87	o	75	85
	18	+11	8	22.7	31.58	5.18	+18	49.22	8.85	+3	75	84
	19	+ 8	7	21.2	31.72	5.15	+13	49.22	8.84	+5	75	84
	20	+ 4	7	19.5	31.86	5.11	+ 6	49.22	8.82	+6	75	84
	21	— ı	7	17.7	32.00	5.08	<b>— 2</b>	49.22	8.81	+7	75	84
	22	<b>-</b> 5	+7	16.0	+32.13	+5.04	<b>-</b> 9	49.22	-8.79	+6	75	84
	23	- 9	7	14.4	32.27	5.00	-16	49.22	8.78	+4	75	84
	24	-12	8	12.8	32.41	4.96	-20	49.21	8.76	+2	75	84
	25	-13	9	11.4	32.55	4.92	-22	49.21	8.75	—ı	76	84
	26	-12	9	10.2	32.68	4.88	<b>—20</b>	49.21	8.74	<b>-</b> 4	76	84
	27	- 9	9	8.9	32.82	4.84	-15	49.21	8.72	<u>-6</u>	76	83
	28	- 5	+8	7.4	+32.96	+4.8o	<b>—</b> 7	49.21	-8.71	-7	76	83
	29	0	7	5.8	33.10	4.75	+ 1	49.21	8.70	$-\frac{1}{7}$	76	83
	30	+ 5	6	3.6	33.24	4.71	+ 8	49.21	8.68	-5	76	83
	31	+ 8	6	0.9	33.37	4.66	+13	49.20	8.67	_r	76	83
Sept.		+ 8	6	22.4	33.51	4.61	+14	49.20	8.66	+2	76	83
-	2	+ 6	+7	20.4	+33.65	+4.56	10	49.20	-8.65	6		83

					Оъ.	Welt-Z	eit			
Tag		Stern- zeit Greenw.	t	f	$\log g$	G	log h	Н	$\log i$	ī
1940	)									
Sept.	2	h 22.7	o.6694	+2.336	1.2436	1 58.4	1.2787	7 29.3	0.8821	+7.623
.oopo.	3	22.8	0.6722	2.342	1.2442	1 58.0	1.2783	7 25.1	0.8848	7.670
	4	22.9	0.6749	2.347	1.2448	I 57.7	1.2778	7 21.0	0.8873	7.715
	5	22.9	0.6776	2.352	1.2454	1 57.4	1.2774	7 16.9	0.8898	7.759
	6	23.0	0.6804	2.357	1.2461	1 57.1	1.2771	7 12.7	0.8921	7.800
	7	23.1	0.6831	2.363	1.2467	1 56.8	1.2767	7 8.5	0.8942	7.838
	8	23.1	0.6858	+2.368	1.2473	1 56.5	1.2763	7 4.3	0.8962	+7.874
	9	23.2	0.6886	2.373	1.2479	1 56.2	1.2760	7 0.1	0.8981	7.908
	10	23.3	0.6913	2.378	1.2486	1 55.9	1.2757	6 55.9	0.8998	7.940
	ΙΙ	23.3	0.6941	2.383	1.2492	1 55.6	1.2754	6 51.7	0.9015	7.979
	12	23.4	0.6968	2.388	1.2498	1 55.3	1.2751	6 47.5	0.9030	7.998
	13	23.5	0.6995	2.393	1.2504	1 55.1	1.2749	6 43.3	0.9043	8.02
	14	23.5	0.7023	+2.397	1.2511	1 54.8	1.2747	6 39.1	0.9055	+8.045
	15	23.6	0.7050	2.402	1.2517	1 54.6	1.2745	6 34.9	0.9067	8.066
	16	23.7	0.7077	2.407	1.2523	1 54.4	1.2743	6 30.6	0.9076	8.08
	17	23.7	0.7105	2.412	1.2530	I 54.2	1.2741	6 26.4	0.9085	8.10
	18	23.8	0.7132	2.417	1.2536	1 53.9	1.2740	6 22.1	0.9092	8.113
	19	23.8	0.7160	2.422	1.2543	1 53.7	1.2739	6 17.9	0.9098	8.124
	20	23.9	0.7187	+2.426	1.2549	1 53.5	1.2738	6 13.6	0.9103	+8.133
	21	0.0	0.7214	2.431	1.2556	I 53.3	1.2737	6 9.4	0.9106	8.139
	22	0.0	0.7242	2.436	1.2563	I 53.2	1.2737	6 5.1	0.9108	8.14
	23	0.1	0.7269	2.440	1.2569	1 53.0	1.2737	6 0.8	0.9109	8.14
	24	0.2	0.7296	2.445	1.2576	I 52.8	1.2737	5 56.6	0.9109	8.14
	25	0.2	0.7324	2.450	1.2583	I 52.7	1.2737	5 52.3	0.9107	8.142
	26	0.3	0.7351	+2.455	1.2590	I 52.5	1.2738	5 48.0	0.9104	+-8.136
	27	0.4	0.7379	2.459	1.2597	I 52.4	1.2738	5 43.7	0.9100	8.128
	28	0.4	0.7406	2.464	1.2604	I 52.3	1.2739	5 39.5	0.9094	8.118
	29	0.5	0.7433	2.469	1.2611	1 52.1	1.2741	5 35.2	0.9088	8.10
1011	30	0.6	0.7461	2.474	1.2618	I 52.0	1.2742	5 30.9	0.9079	8.090
Okt.	1	0.6	0.7488	2.478	1.2625	1 51.9	1.2744	5 26.6	0.9070	8.073
	2	0.7	0.7516	+2.483	1.2632	1 51.8	1.2746	5 22.4	0.9060	+8.053
	3	0.8	0.7543	2.488	1.2640	1 51.7	1.2748	5 18.1	0.9048	8.031
	4	0.8	0.7570	2.493	1.2648	1 51.6	1.2751	5 13.8	0.9034	8.006
	5	0.9	0.7598	2.498	1.2656	1 51.5	1.2753	5 9.5	0.9019	7.979
	6	1.0	0.7625	2.503	1.2663	1 51.4	1.2756	5 5.3	0.9004	7.959
	7	1.0	0.7652	2.508	1.2671	1 51.3	1.2759	5 1.0	0.8986	7.918
	8	I.I	0.7680	+2.513	1.2679	1 51.3	1.2763	4 56.7	0.8967	+7.884
	9	1.2	0.7707	2.518	1.2687	1 51.2	1.2766	4 52.5	0.8947	7.847
	10	1.2	0.7735	2.523	1.2696	1 51.1	1.2770	4 48.2	0.8925	7.808
	11	1.3	0.7762	2.528	1.2704	1 51.1	1.2774	4 44.0	0.8903	7.767
	12	1.4	0.7789	2.534	1.2712	1 51.0	1.2778	4 39.8	0.8878	7.724
	13	1.4	0.7817	+2.539	1.2721	1 51.0	1.2782	4 35.5	0.8852	+7.678

			-		1163-11	Oh Wel	t-Zeit	5				
Tag	3	f'	g'	G'	Allgemeine Präzession seit 1940.0	Δψ	Δψ'	Mittlere Schiefe	Δε	Δε'	j	k
194	0	in 0,001	in o.or				in o"or	23° 26′		in o.or	ino	.001
Sept.	2	+ 6	+7	20.4	+33.65	+4.56	+10	49.20	-8.65	+6	76	83
	3	+ 3	8	18.9	33.79	4.51	+ 4	49.20	8.64	+8	77	83
	4	- 2	8	17.3	33.92	4.46	- 3	49.20	8.63	+-7	77	83
	5	<b>—</b> 6	7	15.6	34.06	4.41	-10	49.20	8.62	+6	77	83
	6	<b>-</b> 8	6	13.5	34.20	4.36	-13	49.20	8.61	2	77	83
	7	<b>–</b> 8	5	10.8	34.34	4.31	—13	49.20	8.60	-2	77	83
	8	<b>—</b> 5	+6	8.2	+34.47	+4.25	<b>—</b> 8	49.19	-8.60	<u>-5</u>	77	82
	9	0	7	6.1	34.61	4.20	0	49.19	8.59	<b>一</b> 7	77	82
	10	+ 5	8	4.5	34.75	4.14	+ 8	49.19	8.58	<b>—</b> 7	77	82
	II	+ 9	9	3.1	34.89	4.09	+15	49.19	8.58	-6	77	82
	12	+12	9	1.7	35.02	4.03	+20	49.19	8.57	<u>-4</u>	78	82
	13	+13	9	0.4	35.16	3.97	+22	49.19	8.57	—I.	78	82
	14	+12	+-8	23.1	+35.30	+3.91	+20	49.19	-8.56	+2	78	82
	15	+ 9	8	21.6	35-44	3.86	+15	49.19	8.56	+4	78	82
	16	+ 5	7	20.0	35.57	3.80	+ 9	49.18	8.56	-+-6	78	82
	17	+ 1	7	18.3	35.71	3.74	+ 2	49.18	8.55	+7	78	82
	18	- 4	7	16.6	35.85	3.68	<u>- 6</u>	49.18	8.55	+-6	78	82
	19	- 8	7	14.8	35.99	3.62	-13	49.18	8.55	+4	78	82
	20	-11	+7	13.3	+36.12	+3.56	-18	49.18	8.55	+2	78	82
	21	-12	8	11.8	36.26	3.50	-20	49.18	8.55	0	79	82
	22	-12	9	10.5	36.40	3.44	-20	49.18	8.55	-3	79	82
	23	-10	9	9.3	36.54	3.38	-17	49.18	8.55	<u>-6</u>	79	82
	24	<b>—</b> 6	8	8.1	36.67	3.32	-10	49.17	8.55	<u>7</u>	79	82
	25	— 2	7	6.7	36.81	3.26	- 3	49.17	8.55	一7	79	82
	26	+ 3	+6	4.8	+36.95	+3.20	+ 4	49.17	-8.56	<b>−</b> 5	79	82
	27	+ 6	5	2.1	37.09	3.14	+10	49.17	8.56	-2	79	82
	28	+ 7	5	23.2	37.23	3.08	+12	49.17	8.57	-+·I	79	82
	29	+ 6	6	20.8	37.36	3.02	+10	49.17	8.57	+5	80	82
	30	+ 3	7	19.0	37.50	2.96	+ 5	49.17	8.58	+7	80	82
Okt.	I	- 2	8	17.5	37.64	2.90	- 2	49.17	8.58	+8	80	82
	2	<b>-</b> 6	+8	16.0	+37.78	+2.84	<b>-</b> 9	49.16	-8.59	+7	80	82
	3	<b>—</b> 8	7	14.3	37.91	2.79	-14	49.16	8.60	+4	80	82
	4	<b>-</b> 9	6	11.9	38.05	2.73	-15	49.16	8.61	0	80	82
	5	<b>—</b> 7	6	9.3	38.19	2.67	-11	49.16	8.61	4	80	82
	6	— 2	7	6.9	38.33	2.62	<b>— 4</b>	49.16	8.62	-7	81	82
	7	+ 3	8	5.0	38.46	2.56	+ 5	49.16	8.63	<del>-8</del>	81	82
	8	+ 8	+9	3.4	+38.60	+2.51	+14	49.16	-8.64	<u>−</u> 7	81	82
	9	+12	9	2.1	38.74	2.45	+20	49.15	8.66	一5	81	83
	10	+14	9	0.8	38.88	2.40	+23	49.15	8.67	-2	81	83
	II	+14	9	23.5	39.01	2.35	+22	49.15	8.68	+1	81	83
	12	+11	8	22.1	39.15	2.29	+18	49.15	8.69	+4	82	83
	13	+ 7	+7	20.7	+39.29	+2.24	+12	49.15	-8.71	+6	82	83

				0 h	Welt-Z	eit			
Tag	Stern- zeit Greenw.	t	f	$\log g$	G	$\log h$	Н	$\log i$	i
1940									
Okt. 13	h I.4	0.7817	+2.539	1.2721	h m	1.2782	h m	0.8852	+7.678
14	1.5	0.7844	2.544	1.2730	1 51.0	1.2786	4 35.5 4 31.3	0.8825	7.630
15	1.6	0.7871	2.550	1.2738	1 50.9	1.2791	4 31.3 4 27.I	0.8796	7.579
16	1.6	0.7899	2.555	1.2747	1 50.8	1.2796	4 22.9	0.8766	7.526
17	1.7	0.7926	2.561	1.2756	1 50.8	1.2801	4 18.7	0.8734	7.47
18	1.8	0.7954	2.566	1.2766	1 50.8	1.2806	4 14.5	0.8701	7.414
19	1.8	0.7981	+2.572	1.2775	1 50.7	1.2811	4 10.3	0.8666	
20	1.9	0.7901	2.578	1.27/5	1 50.7	1.2811	4 6.1	0.8629	7.293
21	2.0	0.8036	2.584	1.2794		1.2822	4 1.9	0.8591	7.229
22	2.0	0.8063	2.590	1.2804	I 50.7	1.2828	3 57.7	0.8550	7.162
23	2.1	0.8090	2.596	1.2813	1 50.6	1.2833		0.8508	7.093
24	2.1	0.8118	2.590	1.2823	1 50.6	1.2839	3 53.6 3 49.4	0.8465	7.023
				_				_	
25	2.2	0.8145	+2.608	1.2833	1 50.6	1.2845	3 45.3	0.8420	+6.950
26	2.3	0.8173	2.614	1.2844	1 50.6	1.2851	3 41.2	0.8373	6.875
27	2.3	0.8200	2.621	1.2854	I 50.5	1.2857	3 37.0	0.8324	6.798
28	2.4	0.8227	2.627	1.2865	1 50.5	1.2864	3 32.9	0.8272	6.718
29	2.5	0.8255	2.634	1.2875	1 50.5	1.2870	3 28.8	0.8220	6.63
30	2.5	0.8282	2.640	1.2886	1 50.5	1.2876	3 24.7	0.8165	6.554
31	2.6	0.8310	+2.647	1.2896	1 50.4	1.2883	3 20.6	0.8108	+6.469
Nov. 1	2.7	0.8337	2.654	1.2907	1 50.4	1.2889	3 16.6	0.8049	6.381
2	2.7	0.8364	2.661	1.2918	1 50.4	1.2896	3 12.5	0.7987	6.291
3	2.8	0.8392	2.668	1.2929	1 50.3	1.2902	3 8.5	0.7924	6.200
4	2.9	0.8419	2.675	1.2941	I 50.3	1.2909	3 4.4	0.7858	6.107
5	2.9	0.8446	2.682	1.2952	1 50.3	1.2915	3 0.4	0.7789	6.011
6	3.0	0.8474	+2.689	1.2963	1 50.2	1.2922	2 56.4	0.7719	+5.914
7	3.1	0.8501	2.697	1.2975	1 50.2	1.2928	2 52.3	0.7645	5.815
8	3.1	0.8529	2.704	1.2986	1 50.1	1.2935	2 48.3	0.7569	5.714
9	3.2	0.8556	2.712	1.2998	1 50.1	1.2941	2 44.3	0.7490	5.611
10	3.3	0.8583	2.720	1.3010	1 50.0	1.2948	2 40.4	0.7409	5.507
11	3.3	0.8611	2.727	1.3022	1 50.0	1.2954	2 36.4	0.7325	5.401
12	3.4	0.8638	+2.735	1.3034	1 49.9	1.2961	2 32.4	0.7237	+5.293
13	3.4	0.8665	2.743	1.3046	1 49.9	1.2967	2 28.5	0.7146	5.183
14	3.5	0.8693	2.751	1.3058	1 49.9	1.2974	2 24.5	0.7052	5.072
15	3.6	0.8720	2.760	1.3070	I 49.7	1.2974	2 20.6	0.6954	4.959
16	3.7	0.8748	2.768	1.3083	1 49.7	1.2986	2 16.7	0.6853	4.845
17	3.7	0.8775	2.776	1.3005	1 49.6	1.2992	2 10.7	0.6748	4.729
								-	
18	3.8	0.8802	+2.785	1.3107	1 49.5	1.2998	2 8.9	0.6638	+4.611
19	3.9	0.8830	2.793	1.3120	I 49.4	1.3004	2 5.0	0.6524	4.492
20	3.9	0.8857	2.802	1.3132	1 49.3	1.3010	2 1.1	0.6407	4.372
21	4.0	0.8884	2.811	1.3145	I 49.2	1.3015	1 57.2	0.6284	4.250
22	4.1	0.8912	2.820	1.3158	1 49.1	1.3021	I 53.3	0.6156	4.127
23	4.1	0.8939	+2.829	1.3170	I 49.0	1.3027	I 49.5	0.6024	+4.003

						0h Welt-Zeit						
Ta,	g	f'	g'	G'	Allgemeine Präzession seit 1940.0	Δψ	Δψ'	Mittlere Schiefe	Δε	Δε'	j	k
194	0	in 0.001	in o.or				in o.or	23° 26′		in o.or	in o.	001
Okt.	13	+ 7	+ 7	20.7	+39.29	+2.24	+12	49.15	-8.71	+-6	82	83
	14	+ 3	7	19.0	39.43	2.19	+ 5	49.15	8.72	+7	82	83
	15	<b>—</b> 2	6	17.3	39.56	2.14	-3	49.15	8.74	+6	82	83
	16	<b>-</b> 6	6	15.5	39.70	2.10	-10	49.15	8.75	+5	82	83
	17	<b>-</b> 9	7	13.8	39.84	2.05	-15	49.14	8.77	+3	82	83
	18	-11	7	12.2	39.98	2.01	-18	49.14	8.78	0	83	83
	19	-12	+ 8	10.8	+40.12	+1.96	-19	49.14	-8.80	-2	83	83
	20	-10	8	9.6	40.25	1.92	-16	49.14	8.82	<b>—</b> 5	83	83
	21	<b>—</b> 7	8	8.4	40.39	1.87	11	49.14	8.83	-6	83	84
	22	- 3	7	7.0	40.53	1.83	- 5	49.14	8.85	<b>−</b> 7	83	84
	23	+ 1	6	5.4	40.67	1.79	+ 2	49.14	8.87	-6	83	84
	24	+ 5	5	3.2	40.80	1.76	+ 8	49.14	8.89	-4	84	84
	25	+ 7	+ 5	0.2	+40.94	+1.72	+11	49.13	—8.91	0	84	84
	26	+ 6	5	21.5	41.08	1.69	+10	49.13	8.92	+3	84	84
	27	+ 4	6	19.4	41.22	1.65	+ 6	49.13	8.94	+6	84	84
	28	0	8	17.8	41.35	1.62	- I	49.13	8.96	+8	84	84
	29	<b>-</b> 5	8	16.3	41.49	1.59	<b>- 9</b>	49.13	8.98	+7	85	84
	30	<b>-</b> 9	8	14.7	41.63	1.56	-15	49.13	9.00	+5	85	85
	31	-10	+ 7	12.8	+41.77	+1.53	-17	49.13	-9.02	+1	85	85
Nov.	I	<b>-</b> 9	6	10.5	41.90	1.51	-15	49.13	9.04	-3	85	85
	2	- 5	7	8.1	42.04	1.48	<b>-</b> 9	49.12	9.06	6	85	85
	3	0	8	5.9	42.18	1.46	0	49.12	9.09	-8	86	85
	4	+ 6	9	4.1	42.32	1.44	+10	49.12	9.11	8	86	85
	5	+11	9	2.7	42.45	1.42	+18	49.12	9.13	-6	86	85
	6	+14	+10	1.3	+42.59	+1.40	+23	49.12	-9.15	-3	86	86
	7	+15	10	0.0	42.73	1.38	+24	49.12	9.17	0	87	86
	8	+13	9	22.7	42.87	1.37	+21	49.12	9.19	+3	87	86
	9	+ 9	8	21.2	43.01	1.36	+15	49.12	9.21	+-5	87	86
	10	+ 5	7	19.6	43.14	1.35	+ 8	49.11	9.23	+7	87	86
	II	0	7	17.9	43.28	1.34	0	49.11	9.26	+-7	88	86
	12	- 5	+ 6	16.1	+43.42	+1.33	- 7	49.11	-9.28	+6	88	86
	13	<b>- 8</b>	6	14.2	43.56	1.32	-13	49.11	9.30	+4	88	86
	14	-ro	7	12.6	43.69	1.31	-17	49.11	9.32	+1	88	87
	15	-11	7	II.I	43.83	1.31	-18	49.11	9.34	-2	89	87
	16	-10	8	9.7	43.97	1.31	-16	49.11	9.36	-4	89	87
	17	- 7	8	8.5	44.11	1.31	11	49.10	9.38	-6	89	87
	18	-3	+ 7	7.1	+44.24	+1.31	<b>-</b> 5	49.10	-9.40	-7	89	87
	19	+ 1	6	5.6	44.38	1.31	+ 2	49.10	9.42	6	90	87
	20	+ 5	5	3.8	44.52	1.32	+ 8	49.10	9.44	-4	90	87
	21	+ 7	5	1.1	44.66	1.32	+11	49.10	9.46	-i	90	87
	22	+ 7	5	22.4	44.79	1.33	+11	49.10	9.48	+2	90	87
	23	+ 5	+ 6	20.1	+44.93	+1.34	+ 8	49.10	-9.50	+5	91	88

			<del></del>	11111	Oh 7	Welt-Z	eit			
Tag	Š	Stern- zeit Greenw.	t	f	$\log g$	G	log h	Н	$\log i$	i
194	.0									
Nov.	23	ь 4.І	0.8939	+2.829	1.3170	h m I 49.0	1.3027	1 49.5	0.6024	+4.003
	24	4.2	0.8967	2.838	1.3183	I 48.9	1.3032	I 45.6	0.5885	3.877
	25	4.3	0.8994	2.847	1.3196	1 48.7	1.3037	1 41.7	0.5739	3.749
	26	4.3	0.9021	2.856	1.3208	1 48.6	1.3042	1 37.9	0.5588	3.621
	27	4.4	0.9049	2.865	1.3221	1 48.5	1.3047	1 34.1	0.5431	3.492
	28	4.4	0.9076	2.875	1.3234	1 48.3	1.3052	1 30.3	0.5265	3.361
	29	4.5	0.9104	+2.884	1.3247	1 48.2	1.3056	1 26.5	0.5091	+3.229
	30	4.6	0.9131	2.893	1.3259	1 48.0	1.3061	1 22.6	0.4909	3.097
Dez.	I	4.6	0.9158	2.903	1.3272	1 47.8	1.3065	1 18.8	0.4717	2.963
	2	4.7	0.9186	2.913	1.3285	I 47.7	1.3069	1 15.0	0.4515	2.828
	3	4.8	0.9213	2.922	1.3298	1 47.5	1.3073	1 11.3	0.4301	2.692
	4	4.8	0.9240	2.932	1.3311	I 47.3	1.3077	I 7.5	0.4076	2.556
	5	4.9	0.9268	+2.942	1.3323	1 47.1	1.3081	1 3.7	0.3835	+2.418
	6	5.0	0.9295	2.952	1.3336	1 46.9	1.3084	0 59.9	0.3579	2.280
	7	5.0	0.9323	2.962	1.3349	1 46.7	1.3087	0 56.1	0.3306	2.141
	8	5.1	0.9350	2.972	1.3361	1 46.5	1.3090	0 52.4	0.3012	2.001
	9	5.2	0.9377	2.982	1.3374	1 46.3	1.3093	0 48.6	0.2697	1.861
	10	5.2	0.9405	2.992	1.3387	1 46.1	1.3096	0 44.8	0.2358	1.721
	11	5.3	0.9432	+3.002	1.3399	1 45.9	1.3098	0 41.1	0.1984	+1.579
	12	5.4	0.9459	3.012	1.3412	I 45.7	1.3100	0 37.3	0.1575	1.437
	13	5.4	0.9487	3.022	1.3424	1 45.4	1.3102	0 33.6	0.1119	1.294
	14	5.5	0.9514	3.033	1.3437	1 45.2	1.3104	0 29.8	0.0611	1.15
	15	5.6	0.9542	3.043	1.3449	1 44.9	1.3106	0 26.1	0.0035	1.008
	16	5.6	0.9569	3.053	1.3462	I 44.7	1.3107	0 22.4	9.9365	0.864
	17	5.7	0.9596	+3.064	1.3474	I 44.4	1.3108	0 18.6	9.8573	+0.720
	18	5.8	0.9624	3.074	1.3486	I 44.2	1.3109	0 14.9	9.7604	0.57
	19	5.8	0.9651	3.084	1.3498	I 43.9	1.3110	0 11.1	9.6355	0.432
	20	5.9	0.9678	3.095	1.3510	1 43.6	1.3111	0 7.4	9.4579	0.28
	21	6.0	0.9706	3.105	1.3522	I 43.3	1.3111	0 3.7	9.1523	+0.14
	22	6.0	0.9733	3.116	1.3534	1 43.0	1.3111	23 59.9	7.477In	-0.00
	23	6.1	0.9761	+3.126	1.3546	I 42.7	1.3111	23 56.2	9.1673n	-0.14
	24	6.2	0.9788	3.136	1.3558	1 42.4	1.3111	23 52.4	9.4654n	0.29
	25	6.2	0.9815	3.147	1.3569	1 42.1	1.3110	23 48.7	9.6405n	0.43
	26	6.3	0.9843	3.157	1.3581	1 41.8	1.3110	23 45.0	9.7649n	0.58
	27	6.4	0.9870	3.167	1.3592	1 41.5	1.3109	23 41.2	9.8609n	0.720
	28	6.4	0.9898	3.178	1.3603	1 41.2	1.3107	23 37.5	9.9395n	0.87
	29	6.5	0.9925	+3.188	1.3614	1 40.9	1.3106	23 33.7	0.0056n	-1.01
	30	6.6	0.9952	3.198	1.3626	1 40.6	1.3104	23 30.0	0.0630n	1.150
	31	6.6	0.9980	3.209	1.3637	1 40.2	1.3102	23 26.3	0.1136n	1.299
	32	6.7	1.0007	+3.219	1.3648	1 39.9	1.3100	23 22.5	0.1590n	

			Oh Welt-Zeit									
Ta	g	f'	g'	G'	Allgemeine Präzession seit 1940.0	Δψ	Δψ'	Mittlere Schiefe	Δε	Δε'	j	k
194	40	in 0.001	in o.or				in o.or	23° 26′		in o.or	in o.	.001
Nov.	23	+ 5	+6	20.I	+44.93	+1.34	+ 8	49.10	<b>-9.50</b>	+5	91	88.
	24	+ 1	7	18.3	45.07	1.35	+ 1	49.10	9.51	+7	91	88
	25	<b>-</b> 4	8	16.7	45.21	1.36	<b>-</b> 6	49.09	9.53	+7	91	88
	26	8	8	15.1	45.34	1.37	-13	49.09	9.55	+6	91	88
	27	-11	7	13.5	45.48	1.39	-17	49.09	9.57	+3	92	88
	28	11	7	11.5	45.62	1.40	-17	49.09	9.58	-r	92	88
	29	<b>-</b> 8	+7	9.3	+45.76	+1.42	-13	49.09	-9.60	-4	92	88
	30	<b>—</b> 3	7	7.0	45.90	1.43	l — 5	49.09	9.61	-7	92	88
Dez.	I	+ 3	8	5.1	46.03	1.45	+ 5	49.09	9.63	-8	93	88
	2	+ 8	9	3.4	46.17	1.47	+14	49.09	9.64	<b>—</b> 7	93	88
	3	+12	9	1.9	46.31	1.49	+20	49.08	9.66	-4	93	89
	4	+14	9	0.5	46.45	1.52	+-23	49.08	9.67	— <b>1</b>	94	89
	5	+14	+9	23.1	+46.58	+1.54	+22	49.08	-9.68	+2	94	89
	6	+11	9	21.7	46.72	1.56	+18	49.08	9.70	+5	94	89
	7	+ 7	8	20.2	46.86	1.59	+11	49.08	9.71	+6	94	89
	8	+ 2	7	18.5	47.00	1.61	+ 3	49.08	9.72	+-7	95	89
	9	- 3	6	16.7	47.13	1.64	<b>—</b> 5	49.08	9.73	+6	95	89
	10	- 7	6	14.8	47.27	1.67	-12	49.08	9.74	+4	95	89
	II	-10	+7	13.1	+47.41	+1.70	-16	49.07	-9.75	+2	95	89
	12	-11	7	11.6	47.55	1.73	-18	49.07	9.76	-r	96	89
	13	-10	8	10.1	47.69	1.76	-17	49.07	9.77	-4	96	89
	14	<b>-</b> 8	8	8.7	47.82	1.79	-13	49.07	9.77	<u>-6</u>	96	89
	15	<b>—</b> 4	7	7.3	47.96	1.82	<b>—</b> 6	49.07	9.78	<b>—</b> 7	97	89
	16	0	7	5.8	48.10	1.85	+ 1	49.07	9.78	-7	97	89
	17	+ 4	+6	4.0	+48.24	+1.88	+ 7	49.07	一9.79	<u>-5</u>	97	89
	18	+ 7	5	1.8	48.37	1.91	+12	49.06	9.79	-2	97	89
	19	+- 8	5	23.3	48.51	1.94	+13	49.06	9.80	+-I	98	89
	20	+ 6	6	21.1	48.65	1.97	+11	49.06	9.80	+4	98	89
	21	+ 3	7	19.1	48.79	2.00	+ 5	49.06	9.80	+6	98	89
	22	— 2	7	17.4	48.92	2.04	- 3	49.06	9.80	+7	98	89
	23	-6	+8	15.8	+49.06	+2.07	-10	49.06	-9.80	+6	99	89
	24	-10	8	14.2	49.20	2.10	-16	49.06	9.80	+4	99	89
	25	-11	7	12.3	49.34	2.13	-18	49.06	9.80	+1	99	89.
	26	<u>- 9</u>	7	10.1	49.47	2.16	-15	49.05	9.80	-3	100	89.
	27	<u>- 5</u>	7	8.0	49.61	2.20	<b>-</b> 9	49.05	9.80	<u>-6</u>	100	89
	28	0	7	5.9	49.75	2.23	0	49.05	9.80	7	100	89
	29	+ 6	+8	4.1	+49.89	+2.26	+ 9	49.05	<b>−9.79</b>	-7	100	89
	30	+10	9	2.6	50.02	2.29	+17	49.05	9.79	<u>-5</u>	IOI	89
	31	+13	9	1.1	50.16	2.32	+21	49.05	9.78	-2	101	89
	32	+13	+9	23.6	+50.30	+2.35	+22	49.05	-9.78	+1	IOI	89

## für 12<sup>h</sup> Sternzeit Greenwich

Wel	t-Zeit	t	A	A'	В	B'	C	D
r	940			in 0.00001		in o.oor		
Jan.	0.226	-0.0035	+0.15514 335	+228	+8.907	—6 <sub>5</sub>	- 2.822	+20.238
o wii.		-0.0008	0.15849 335	+ 74	8.904	-76	2 750 340	20.180
	2.220	+0.0020	0.16184 335	- 84	8.901	-67	3.478 328	20.116
		0.0027	0.16517 333	-200	8.897	-43	3.805 327	20.046 70
	3.218		0.16850 333	1	8.892	<del>- 8</del>		: 77
	4.215	0.0074	0.16850 331	-267	0.092		4.131 324	19.969 83
	5.212	0.0102	0.17181 329	-245	8.887 6	+27	4.455 323	19.886 89
	6.209	0.0129	+0.17510 328	-158	+8.881 6	+57	- 4.778 <sub>321</sub>	+19.797 95
	7.207	0.0156	0.17838	— 23	8.875	+73	5.099 320	19.702
	8.204	0.0184	0.18163 323	+128	8.868	+74	5.419 318	19.600
	9.201	0.0211	0.18486 322	+252	8.860 8	+61	5.737 317	19.492
	10.198	0.0238	0.18808	+341	8.852 8	+39	6.054 315	19.378
	11.196	0.0265	0.19128 320	+368	8.844 9	+11	$6.369\frac{313}{312}$	19.258
	12.193	0.0293	+0.19446 <sub>315</sub>	+339	+8.835 10	-19	- 6.681 <sub>310</sub>	+19.131
	13.190	0.0320	0.10761	+260	8.825	<del>-44</del>	6.991 308	18.998
	14.187	0.0347	0.00074 3*3	+134	8.814	-61	7.299 306	T8 860
	15.185	0.0375	0.20286	- 22	8.803	-7I	7.605	18 716 144
	16.182	0.0402	0.20605	-183	8 702	-67	7.008 303	т8.566
	17.179	0.0429	0.21002 307	-328	8.780	-52	8.208 300	18.411 161
	18.177	0.0457	ar 206	-432	+8.768	-26	- 8.506 <sub>296</sub>	+18.250
	19.174	0.0484	0.07607	-471	8.756 12	+ 7	8.802	18.083
	20.171	0.0511	O OTOOF	-433	8.743 13	+37	0.005	17.910
	21.168	0.0538	0.00001	-318	8.729 14	+65	9.095 289	17.731 184
	22.166	0.0566	0.22494 289	-147	8.715 14	+75		17.547 189
	23.163	0.0593	0.22783 286	+ 45	8.701	+69	9.070 <sub>283</sub> 9.953 <sub>281</sub>	17.358 195
	24.160	0.0620	+0.23069 <sub>284</sub>	+214	+8.687	+46	—10.234 <sub>278</sub>	+17.163 200
	25.157	0.0648	0.23353 281	+321	8.672	-+-11	TO 512	16.963 206
	26.155	0.0675	0.23634 278	+344	8.657 16	-26	TO.786	16.757 211
	27.152	0.0702	0.22012	+280	8.641 16	<b>-</b> 59	TT.056	
	28.149	0.0730	0.23912 <sub>275</sub> 0.24187 <sub>272</sub>	+149	8.625 16	-76	TT 222	16 22T
	29.147	0.0757	0.24107 272	— II	8.609 15	<b>—75</b>	TT 585 203	16.111
			0.24459 268				-37	225
	30.144	0.0784	+0.24727 <sub>265</sub>	-148	+8.594 16	-56	-11.844 <sub>255</sub>	+15.886
	31.141	0.0812	0.24992	-231	8.578 16	-22	12.099 252	15.055 226
Febr.	1.138	0.0839	0.25254 250	-240	8.562 16	+14	12.351 240	15.419 241
	2.136	0.0866	0.25513	-170	8.546	+47	12.600	15.178
	3.133	0.0893	0.25700	<b>- 48</b>	8.530 16	+68	12.845	14.933
	4.130	0.0921	0.26020 249	+ 97	8.514 16	÷75	13.085 235	14.684 253
	5.127	0.0948	+0.26269	+233	+8.498	+67	-13.320 <sub>230</sub>	+14.431 258
	6.125	0.0975	0.20510	+332	8.481	+47	13.550	14.173 263
	7.122	0.1003	0.20759	+376	8.464 16	+21	13.777	13.910 268
	8.119	0.1030	0.26008	+363	8.448 16	<b>–</b> 8	14.000 219	13.642
	9.116	0.1057	0.27234	+298	8.432 16	-34	14.219 214	13.370 275
	10.114	0.1085	+0.27466	+186	+8.416	-55	-14.433	+13.095

Welt-Zeit	t	$\boldsymbol{A}$	A'	B	B'	С	D
1940			4		in ő.oor		
Febr. 10.114	0.1085	+-0.27466	in 0.00001 +186	+8.416	4,000,000,000	T/ /22	+13.095
11.111	0.1112	0.07606	+ 45	8 200	$-55 \\ -67$	-14.433 <sub>210</sub>	12.816 279
12.108		22/		8.399 16		14.643 205 14.848 200	282
	0.1139	0.27923 223	-109	8.383 16	-67		12.533 287
13.106	0.1166	0.28146 220	-262	8.367	—57	15.048	12.246 290
14.103	0.1194	0.28366 217	<del>-386</del>	8.352	-37	15.243 190	11.956
15.100	0.1221	0.28583 213	<del>-459</del>	8.337	- 8	15.433 186	11.663 297
16.097	0.1248	+0.28796 210	<b>-462</b>	+8.322	+23	-15.619 <sub>181</sub>	+11.366
17.095	0.1276	0.29006 208	-394	8.307	+51	15.800 176	11.064
18.092	0.1303	0.29214 205	-254	8.292	+69	15.976	10.759 308
19.089	0.1330	0.29419 203	— 74	0.277	+74	16.147 166	10.451
20.086	0.1358	0.29622	+106	8.203	+60	16.313	10.141
21.084	0.1385	0.29822	+245	8.250	+29	16.474	9.828 313
22.081	0.1412	+0.30019	+313	+8.237	- 8	-16.629	+ 0.512
23.078	0.1440	0.30213 192	+-289	8.224 12	-43	16.779 146	0.103
24.076	0.1467	0.30405 188	+189	8.212	-70	16.925 140	8.871
25.073	0.1494	0.30593 186	+ 42	8.200	<b>—78</b>	T7 065	8.547
26.070	0.1521	0.30779 184	-106	8.189	-67		8.220
27.067	0.1549	0.30963 182	-212	8.178 11	-39	17.200 129	$7.891\frac{329}{332}$
28.065	0.1576	+0.31145 180	-247	+8.167 10	- 1	-17.452 <sub>118</sub>	+ 7.550
29.062	0.1603	0.31325	-199	1 X.T.57	+34	X 7 770	7.225
März 1.059	0.1631	0.31504 176	- 8 <sub>4</sub>	8.148	+62	17.570 113	6.880
2.056	0.1658	0.21680	+ 65	8 720	+75	TRACT	6.551 338
3.054	0.1685	0.21852 1/3	+213	8 TOT	+73	T7 802	6.212 339
4.051	0.1713	0.32025 170	+333	8.123 7	+57	17.990 97	5.871 341 343
5.048	0.1740	+0.32195 168	+398	+8.116	+31	T8 08T	+ 5.528
6.046	0.1767	0.32363 167	+401	8 700 7	+ 2	78 767 80	5.184 344
7.043	0.1794	0.20520	+346	8 102	-26	18.247	4.839
8.040	0.1822	0 00606	+246	8.097	<del>-48</del>	18.322 75	4.492
	0.1849	0 22867		8.092	-6 <sub>2</sub>	18.391 63	340
9.037 10.035	0.1849	0.32001 163	+113	8.088 4	-66	T8 151	4.143 350
	0.1870	0.33024 161	- 36	4		3-	3.793 35°
11.032	0.1904	+0.33185 160	-186	+8.084	-6I	-18.512	+ 3.443
12.029	0.1931	0.33345 .60	-317	8.081	-45	18.564	3.093 35
13.026	0.1958	0.33505	-411	8.079 2	-18	18.611	2.742 353
14.024	0.1986	1 0.33004	-440	8.077	+ 9	18.652	2.300
15.021	0.2013	0.33823	-413	8.076	+38	18.687 35	2.037 35:
16.018	0.2040	0.33980 156	-313	8.076	+62	18.716	1.684 35
17.015	0.2068	+0.34136 <sub>156</sub>	-162	+8.076	+72	-18.740 18	+ 1.330
18.013	0.2095	0.24202	+ 9	8 077	+66	18.758	0.976
19.010		0 24447 -33	+161	8.078	+43	18.771	0.622 35
20.007		0.24602	+256	8.080	+ 9	18.778	$+ 0.268^{35}$
21.005		0.34003 156	+271	8.083	-27	18.779	- o.o86 <sup>35</sup>
22.002		+0.34914	+204	+8.087	-61	-18.775 4	$-0.439^{35}$
	4	1	1 . 254	1 0.007	01	R 40	1 -1439

Welt-Zeit	t	A	A'	В	B'	С	D
1940			ļ <u>.</u>		in 0.001		
März 22.002	0.2204	+0.34914 156	in 0.00001 +204	+8.087	—61	-18.775	- o".439 <sub>354</sub>
22.999	0.2231	0.25070	+ 73	8.091	<b>—77</b>	18.765	0.793 354
23.996	0.2259	0.25226	- 77	8.096	<del>-75</del>	18.750	1.146 353
24.994	0.2286	0.35220 157	-206	8.101	-54	T8 720	- 354
25.991	0.2313	0.35383	-268	8.108 7	—I9	18.703 26	1.498 351
		0.35540		9 7	_	18.671	351
26.988	0.2341	0.35697 158	-251	u u	+19	30	2.200 350
27.985	0.2368	+0.35855 159	-152	+8.123 8	+52	-18.633 43	- 2.550 <sub>350</sub>
28.983	0.2395	0.30014	— <sub>3</sub>	8.131 8	+73	18.590	2.900 348
29.980	0.2422	0.36174 160	+163	8.139	+77	18.542	3.248 346
30.977	0.2450	0.36334 161	+310	8.148	+66	18.488	3.594 345
31.975	0.2477	0.36495	+405	8.158 ,,	+43	18.428	3.939
April 1.972	0.2504	0.36657 163	+435	8.169 11	+13	18.363	4.283 343
2.969	0.2532	+0.36820	+403	+8.180	-17	-18.293	$-4.626_{342}$
3.966	0.2559	0.36985 167	+313	8.191 12	-42	18.218 75	1 4.068
4.964	0.2586	0.37152 168	+181	8.203	60	18.138 86	5.208
5.961	0.2614	0.27220	+ 31	8.216	-67	18.052	5.646
6.958	0.2641	0.27400	-120		-64	17.060	5.082
7.955	0.2668	0.37661 173	-252	8.244	50	17.863 97	$6.316 \frac{334}{332}$
8.953	0.2696	+0.37834 174	-355	+8.258	-28	-17.762 <sub>107</sub>	- 6648
9.950	0.2723	0.38008 176	-408	0.273	0	17.655	6.077
10.947	0.2750	0.38184 178	-400	8.288 16	+27	17.543	7 204 5-7
11.944	0.2777	0.38362 180	-330	8.304 16	+54	17.426	7 620 323
12.942	0.2805	0.38542 183	-203	X 220	+69	17.304 127	7.953 <sub>321</sub>
13.939	0.2832	0.38725 185	- 46	8.337 18	+68	17.177	8.274 318
14.936	0.2859	+0.38910 187	+105	+8.355 18	+55	-17.045 <sub>136</sub>	- 8.502
15.934	0.2887	0.39097 189	+215	8.373 18	+25	16.909	8.007
16.931	0.2914	0.20286	+259	8.391 18	-11	16 768	0.218
17.928	0.2941	0.20477	+218	8.400	<del>-47</del>	T6 62T	9.527
18.925	0.2969	0.20671 197	+109	8.428	<b>—70</b>	T6 470 131	0.824
19.923	0.2996	0.39867	- 42	8.447	-77	16.314 161	10.138 304
20.920	0.3023	+0.40066	-187	+8.466	-66	-16.153 <sub>165</sub>	-10.439 <sub>297</sub>
21.917	0.3050	0.40268	-282	8 486	-37	15.988 169	
22.914	0.3078	0.40472	-301	8,506	+ 1		TT 020
23.912	0.3105	0.40678	-237	8 526	-+35	TE 645 1T	11.321
24.909	0.3132	0.40887	-104	8 546	+63	TE 466	11.608 284
25.906	0.3160	0.41099 214	+ 69	8.566 21	+78	15.400 183	11.892 281
26.904	0.3187	+0.41313 217	+239	+8.587	+74	-15.097 <sub>190</sub>	-12.173 <sub>277</sub>
27.901	0.3214	0.41530	+372	8.608	+55	14.907	12.450 273
28.898	0.3242	0.41750 222	+442	8.629 21	+27	T 4 2 T A	12.723
29.895	0.3269			8.650 22	-4	T4 5T2	12.723 268
30.893		0.41972 225	+437	8 672		7.4.000	12.991 265
Mai 1.890	0.3290	0.42197 <sub>228</sub> +0.42425	+371	8.672 22 +8.694	-34 -54		13.256 261
1.090	0.3324	1-0.42425	+251	70.094	-54	—14.10I <sup>′</sup>	-13.517

Wel	t-Zeit	t	A	A'	В	B'	С	D
10	)40			in 0.00001		in 0.001		
Mai	1.890	0.3324	+0.42425 231	+251	+8.694 22	—54	-14.101	$-13.517_{28r}$
	2.887	0.3351		+102	8.716 21	-67	13.800 211	T2 555 -03
	3.884	0.3378	0 4080T 233	- 54	8.737 21	-66	12.675	T4.020 -34
	4.882	0.3405	0.42128	-198	8.758 21	-57	13.456	14.027
	5.879		0.42267		8 770			240
	6.876	0.3433	0.43307 242	-312	8.779 22	-37	13.233 226	14.525
		0.3460	0.43609 244	-379	8.801 21	-10	13.007 230	14.766 236
	7.873	0.3487	+0.43853 248	-386	+8.822	+19	-12.777 <sub>233</sub>	-15.002 <sub>232</sub>
	8.871	0.3515	0.44101 251	-330	8.844	+45	12.544	15.234 227
	9.868	0.3542	0.44352	-224	8.865	+63	12.307 240	T5.46T 22/
	10.865	0.3569	0.44605 266	- 76	8.886 21	+69	T2.067	15.684
	11.863	0.3597	0.44861 259	+ 77	8.907 21	+60	11.823	15.903
	12.860	0.3624	0.45120 261	+200	8.928 20	+37	11.576 247	16.118 210
	13.857	0.3651	+0.45381 263	+264	+8.948 21	-+E	-11.326	-16.328 <sub>205</sub>
	14.854	0.3678	0.45644 266	+251	8.969 20	—3 <b>1</b>	11.073 253	16 522
	15.852	0.3706	0.45910	-+16o	8.989 20	-58		16.733
	16.849	0.3733	0.46179 271	+ 19	9.009 20	<b>−75</b>	TO 558 254	16.928
	17.846	0.3760		-137	9.029 20	-71	TO 206	T7 TT8 190
	18.843	0.3788	0.46724 278	-263	9.049 20	-50	10.031 267	17.303 181
	19.841	0.3815	+0.47002	-325	+9.069	-18	- 9.764 <sub>269</sub>	-T7.484
	20.838	0.3842	0.47282	-299	9.088	+22	9.495 272	17.660
	21.835	0.3870	0.47563 284	-196	9.106 18	<del>+54</del>	9.223 275	17.831 166
	22.833	0.3897	0.47847 286	— 4I	9.124 18	+73		17 007
	23.830	0.3924	0.48133 288	+137	9.142 18	+76	8 670	18.158
	24.827	0.3952	0.48421 291	+294	9.160 17	+64	8.390 282	18.314
	25.824	0.3979	-LO 487T2	-+400	+9.177 17	+41	8 708	_T8 464
	26.822	0.4006	0.49005 294	+438	9.194 17	+ 9	7.824 <sub>287</sub>	T8.600 145
	27.819	0.4033	0.40200	+404	9.211 16	-22	7.537 289	18.748
	28.816	0.4061	0.40506	+307	9.227	-48	7.248	18.882
	29.813	0.4088	0.40805	+168	9.242	-65	6.058	TO OTT 129
	30.811	0.4115	0.50195 301	+ 11	9.257	—70	6.666 293	10.135
	31.808	0.4143		-146	+9.272	-63	$-6.373_{295}$	-10.254
Juni	1.805	0.4170	0.50800	-279	9.286	<del>-47</del>	L D 07X	TO 268
o um	2.802	0.4197	O ETTOE 3°3		0.200 14	-20	5.781	19.476
	3.800		0.51411	-365 -304	9.300 13		F 480 299	
		0.4225	0.51411 308	<del>-394</del>	9.313 13	+ 7	5.482 300	19.578 97
	4.797	0.4252	0.51719 310	-358	9.326	+36	5.182 300 4.882 300	19.675 92
	5.794	0.4279	0.52029 312	-259	9.338 11	+59	302.	19.767 86
	6.792	0.4306	+0.52341 314	-117	+9.349	+70	- 4.580 <sub>304</sub>	-19.853 <sub>80</sub>
	7.789	0.4334	0.52055	+ 43	9.360	-+65	4.276 306	19.933 75
	8.786	0.4361	0.52969	+186	9.370	+46	3.970	20.008 60
	9.783	0.4388	0.53284 315	+275	9.380	+15	3.663 307	20.077 62
	10.781	0.4416	0.53599 317	+293	9.389	-18	3.356 307	20.140 58
	11.778	0.4443	+0.53916	+226	+9.398	-50	- 3.049	-20.198

Welt-Zeit	t	A	A'	В	B'	C	D
1940					"		1121
Juni 11.778	0.4443	+0.53916	+226	+9.398 8	in 0.001	-3.049 <sub>208</sub>	-20.198
12.775	0.4470	0 54222 31/	+101	0.406	-50 69	2 741	20.251 53
13.772	0.4498	O EVEET	- 60	9.414	_	2 /21	20.298 47
14.770	0.4525	0.54860	-204	0.421	—73 —50	2.121	
15.767	0.4552	0 55180 320	-299	0.427	<del>59</del>	1.811	20.339 36
16.764				9.427 6	<u>-30</u>	311	20.375 30
10.704	0.4579	0.55509 320	-316	9.433	+ 5	1.500 311	20.405 24
17.762	0.4607	+0.55829 320	-252	+9.438	+39	-1.189 311	-20.429 18
18.759	0.4634	0.56149 320	-122	9.442	-+-64	0.878 312	20.447
19.756	0.4661	0.56469 320	+ 42	9.446	+74	0.566	20,460
20.753	0.4689	0.56789 321	+207	0.450	+71	-0.254	20.467 7
21.751	0.4716	0.57110	+338	0.453	+51	+0.058	20.469 =
22.748	0.4743	0.57432 321	+406	9.456 3	+22	0.370 312	20.465
23.745	0.4771	+0.57753 321	+406	+9.457	— 7	+0.682	-20.456 <sub>15</sub>
24.742	0.4798	0.58074 320	+340	9.458	-36	0.993 311	20.441
25.740	0.4825	0.58394 319	+221	9.458	<del>-57</del>	1.304	20.420 26
26.737	0.4853	0.58713 319	+ 72	9.457 <sub>1</sub>	<b>-69</b>	1.615 311	20.394 32
27.734	0.4880	0.59032 319	- 92	9.456 <sub>1</sub>	68	1.926	20.362
28.732	0.4907	0.59351 318	-238	9.455 2	_ <sub>55</sub>	2.236 309	20.324 43
29.729	0.4934	+0.59669	-349	+9.453	-33	+2.545 308	-20.281 49
30.726	0.4962	0.59986 317	-410	9.450	<b>-</b> 4	2.853 307	20.232
Juli 1.723	0.4989	0.60303 315	-400	9.447	+26	3.160 307	20.177 60
2.721	0.5016	0.60618	-322	9-443	+52	3.467 306	20.117 65
3.718	0.5044	0.60932 313	-189	9.439 5	+69	3.773 305	20.052
4.715	0.5071	0.61245 313	— 24	9.434 6	+71	4.078 303	19.981 76
5.712	0.5098	+0.61558 311	+140	+9.428 6	+58	+4.38t 303	-19.905 <sub>82</sub>
6.710	0.5126	0.61869 310	+260	9.422 7	+31	4.684 301	19.823 87
7.707	0.5153	0.62179 208	+315	9.415	- 6	4.985 300	19.736 93
8.704	0.5180	0.62487 307	+284	9.408	39	5.285 298	10.643
9.701	0.5207	0.62794 305	+187	9.401 7	65	5.583 206	19.544
10.699	0.5235	0.63099 303	+ 33	9.393 9	<b>一74</b>	5.879 295	19.440 109
11.696	0.5262	+0.63402	-122	+9.384 10	-67	+6.174 293	-19.331
12.693	0.5289	0.63703	-243	9.374	<del>-43</del>	0.407	19.217 119
13.691	0.5317	0.64003	-295	9.365 10	<b>—</b> 7	6.759 200	19.098
14.688	0.5344	0.64302	-263	9.355 10	+28	7.049 288	18.973
15.685	0.5371	0.04599	-165	9-345	+55	7.337 286	18.842
16.682	0.5399	0.64893 292	— 16	9.334 11	+72	7.623 285	18.706
17.680	0.5426	+0.65185	+146	+9.323	+72	+7.908 282	-18.565 145
18.677	0.5453	0.05470	+284	9.311	+59	8.190	18.420
19.674	0.5481	0.05705	+372	9.299	+34	8.469	18.270
20.671	0.5508	0.66051	+399	9.200	+ 3	8.746 275	18.115 161
21.669	0.5535	0.00335	+357	9.273	-26	9.021 272	17.954 167
22.666	0.5562	+0.66616	+263	+9.259	<b>-50</b>	+9.293	-17.787

Welf	t-Zeit	t	A	A'	В	B'	C	D
10	)40					in 0.001		
Juli	J	0.5562	+0.66616	in 0.00001 +-263	+9.259	-50	+ 9.293	
o un	23.663	0.5590	0.66895 277	+128	0.246	-6 <sub>5</sub>		-17.787 <sub>172</sub>
	24.661	0.5617		- 29	9.246 14 9.232 14	<del>-69</del>	9.563 268	17.615 176
	25.658	0.5644	0.67446	-182	9.232 14	-6I	9.831 266	17.439 180
							10.097 263	17.259 185
	26.655	0.5672	0.67718 269	-314	9.204	44 6	10.360 259	17.074 190
	27.652	0.5699	0.67987 267	-403	9.190	-16	10.619 256	16.884 195
	28.650	0.5726	+0.68254 265	-428	+9.175	+12	+10.875 252	-16.689 <sub>200</sub>
	29.647	0.5754	0.08519 262	-385	9.160	+42	11.127	10.480
	30.644	0.5781	0.08781	-280	9.144	+65	11.377	10.285
	31.641	0.5808	0.69040	-125	9.129 16	+74	11.624 244	10.077
Aug.	1.639	0.5835	0.69296 254	+ 46	9.113 16	+68	11.000	15.004 279
	2.636	0.5863	0.69550 250	+197	9.097 16	+43	12.109 238	15.646
	3.633	0.5890	+0.69800	+290	-+9.081 <sub>16</sub>	+ 9	+12.347	-15.424
	4.630	0.5917	0.70048	+303	9.065	-26	12.581 230	15.198 231
	5.628	0.5945	0.70294 243	+235	9.048 16	<i>−</i> 57	12.811 227	
	6.625	0.5972	0.70537 240	+106	9.032 16	<b>−74</b>	0 22/	14.732 239
	7.622	0.5999	0.70777	<b>— 48</b>	9.016	-73	13.038 224	14.493 243
	8.620	0.6027	0.71014 235	-183	9.000 17	-53	13.482 216	14.250 247
	9.617	0.6054	+0.71249 232	-262	+8.983 16	-23	+13.698 213	-14.003 <sub>251</sub>
	10.614	0.6081	0.71481 230	-257	8.967 16	+13	13.911 209	13.752 255
	11.611	0.6109		-180	8.951 16	+47	14.120 205	13.497 260
	12.609	0.6136	0.71937 223	- 47	8.935 16	+67	14.325 200	13.237 260
	13.606	0.6163	0.70160	+112	8.919 16	+74	T4.525	12.073
	14.603	0.6190	0.72381 218	+257	8.903 16	+66	14.525 <sub>197</sub> 14.722 <sub>193</sub>	12.973 267 12.706 270
								270
	15.600	0.6218	+0.72599 215	+362	+8.887 16	+42	+14.915 189	12.436 273
	16.598	0.6245	0.72814	+402	8.871	+14	15.104 185	12.103
	17.595	0.6272	0.73027	+380	8.856	-15	15.289 180	11.000 .0-
	18.592	0.6300	0.73237 208	+302	8.841	<b>-41</b>	15.469 176	11.605
	19.590	0.6327	0.73445	+182	8.826	-59	15.645	11.321 -0-
	20.587	0.6354	0.73650 202	+ 36	8.811 15	-67	15.817 168	11.034 290
	21.584	0.6382	+0.73852 200	-116	+8.797	-64	+15.985 164	-10.744 <sub>294</sub>
	22.581	0.6409	0.74052	-256	8.783	-49	16.149	10.450 298
	23.579	0.6436	0.74249 195	-364	8.769	-28	10.308	TO 152
	24.576	0.6463	0.74444	-424	8.755	- I	10.402	0.851
	25.573	0.6491	0.74636	-420	8.741	+29	16.611	9.549 305
	26.570	0.6518	0.74826 187	-348	8.727 13	+54	16.756 145	9.244 308
	27.568	0.6545	+0.75013 186	-221	+8.714	+72	+16.896 136	- 8 026
	28.565	0.6573	0.75199 184	— 57	8.701 13	-+71	17.032	8.625 313
	29.562	0.6600	0.75383 182	+103	8.689 11	+57	17.163	8.312 313
	30.559	0.6627	0.75565 179	+226	8.678	+28	17.288	=6
	31.557	0.6655	0.75744	+279	8.667	-10	17.409 116	7 677
-	1.554	0.6682	0.75744 <sub>178</sub> +0.75922	+249	+8.656	-44	+17.525	-7.356

Welt-Zeit	t	A	A'	В	B'	C	D
1940					in o.oor		1 2 3 1 1 1
Sept. 1.554	0.6682	+0.75922	in 0.00001 +249	+8.656	44	+17.525	-7.256
2.551		0.76098	+145	8 645	<del>-69</del>	17.636	$-7.356_{323}$
3·549	1 .	0.76272	+ I	8 625	<del>-76</del>	T7 742	6 708 323
4.546		0.76442		8.625	-67	17.743 101	6.381 327
		0.76672	-143	96-6		17.940	
5.543		0 46481	-243	06-0	-39	18.031 86	6.052 331
6.540		0.76781 167	-269 ·	8	- 3	18.031 86	5.721 333
7.538	0.6846	+0.76948 166	-211	+8.600	+34	+18.117 81	-5.388
8.535		0.77114 164	- 8 <sub>5</sub>	8.593	-+61	18.198 76	5.054 336
9.532		0.77278 163	+ 77	8.586	+75	18.274	4.718 228
10.529	0.6928	0.77441 161	+237	8.579 6	+70	18.345	4.380 339
11.527	0.6955	0.77602	+361	8.573	+53	18.410	4.041 341
12.524	0.6982	0.77761 159	+426	8.568 4	+27	18.470 55	3.700 342
13.521	0.7010	+0.77920 158	+421	+8.564	<b>—</b> 4	+18.525 50	$-3.358_{342}$
14.519	0.7037	0.78078	+354	8.560	-33	18.575	3.016
15.516		0.78236	+240	8.556	-52	18.619	2.672 345
16.513	0.7091	0.78393	+ 98	8.553 2	-64	18.658	2.327 345
17.510	0.7119	0.78549	- 47	8.551 2	-64	18.691 33	T.082
18.508	0.7146	0.78704 155	-190	8.549	-53	18.719 23	1.635 347
19.505	0.7173	+0.78859	<del>-307</del>	+8.548	<i>−</i> 37	+18.742 18	-1.288 <sub>348</sub>
20.502	0.7201	0.79013	-385	8.548	-11	18.760	0.940 348
21.499	0.7228	0.79168	-410	8.548 r	+17	18.772 6	0.592 349
22.497	0.7255	0.70222	-371	8.549	+43	18.778	-0.242
23.494	_	0.79477	-276	8.551 2	+62	18.779 -	+0 106 349
24.491	0.7310	0.79631 154	<b>—137</b>	8.553 3	+72	18.775 4	0.455 349 0.455 350
25.488	0.7337	+0.79785 154	+ 17	+8.556	+-66	+18.765	+0.805 350
26.486	0.7365	0.79939	-+-151	8.559 4	-+41	18.750	1.155
27.483	0.7392	0.80094	+232	8.563 5	+ 7	18.729 26	1.504
28.480	0.7419	0.80249	+238	8.568 6	-29	18.703	1.852 348
29.478	0.7446	0.80404	+165	8.574 6	-59	18.671	2.200 348
30.475	0.7474	0.80560	+ 34	8.580 6	<b>—75</b>	18.634 43	2.548 347
Okt. 1.472	0.7501	+0.80717	-114	+8.586	<b>—74</b>	+18.591	+2.895 346
2.469		0.80875	-238	8.593 8	-52	18.543	3.241
3.467		0.81034 159	-295	8.601	21	18.480	2,586
4.464		0.81193 160	-270	8.610	+18	T8 420 39	2 021
5.461		0.81353 162	-160	8.6ro 9	+51	т8.265	1.276 373
6.458		0.81515 164	+ 3	8.629 11	+73	18.295 70	4.619 343
7.456	0.7665	+0.81679	+184	+8.640	+75	+18.219	+4.961 <sub>341</sub>
8.453		0.81845	+337	8.651	+62	18.138 86	
9.450		0.82011	+437	8.663	+36	18.052	$5.641 \frac{339}{338}$
10.448		0.82179 170	+461	8.675	+ 5	17.061	F 070 330
11.445		0.82349 171	+-416	8.687 13	24	T7 864 9/	6 215
12.442		+0.82520	+312	+8.700 13	<b>-48</b>	+17.761	+6.650 335

Welt-Zeit	t	A	A'	В	B'	С	D
1940					. "		suites and
Okt. 12.442	0.7801	±0.82520	in 0.00001	8"700	in 0.001 —48	+17.761 108	+ 6.650
	0.7829	+0.82520 0.82693	+312	+8.700	-40 -62	17.653 113	
13.439	0.7856		+173 + 21	8.713 14	-66	17.033 113	H 272 330
	0.7883	0 82046	-126	8.727		17.540 118	7.313 328
15.434		0.83040 180		8.742 16	<b>-58</b>	17.422	7.641 326
16.431	0.7911	0.83226	-249	8.758	-42 -78	17.298 129	7.967 325
17.428	0.7938	0.83408 183	-334	8.773 16	18	17.169 134	8.292 323
18.426	0.7965	+0.83591 186	-376	+8.789	+ 6	+17.035	+ 8.615 321
19.423	0.7993	0.83777	-362	8.800	+35	10.896	0.930 318
20.420	0.8020	0.83907	-291	8.823	+57	10.752	9.254 315
21.418	0.8047	0.84159	-176	8.840 18	+70	10.002	9.569 312
22.415	0.8074	0.84353	- 33	8.858	+67	1 10.447	9.881
23.412	0.8102	0.84550 200	+101	8.876 18	+50	16.287 165	10.189 306
24.409	0.8129	+0.84750	+199	+8,894 19	+23	+16.122	+10.495 303
25.407	0.8156	0.84952	+-230	8.913	-11	15.953 174	10.798 301
26.404	0.8184	0.85156 207	+183	8.932 20	-46	15.779 179	11.099 297
27.401	0.8211	0.85363 210	+ 68	8.952 20	-70	15.600 184	11.396 294
28.398	0.8238	0.85573	— 8o	8.972 20	-76	15.416 189	11.690 290
29.396	0.8266	0.85787	-224	8.992 20	-64	15.227 194	11.980 287
30.393	0.8293	0.86004	-318	+9.012	-37	+15.033	+12.267 283
31.390	0.8320	0.86224	-330	9.033 21	+ 1	14.835 203	12.550
Nov. 1.387	0.8347	0.80447	-254	9.054 21	+38	14.632 208	12.830 276
2.385	0.8375	0.86673	-104	9.075 20	+64	14.424 212	13.106 272
3.382	0.8402	0.80002	+ 81	9.095 21	+76	14.212 216	13.378 268
4.379	0.8429	0.87134 235	+265	9.116 21	+72	13.996 220	13.646 265
5.377	0.8457	+0.87369	+403	+9.137 21	+50	+13.776 224	+13.911 261
6.374	0.8484	0.87607 241	+474	9.158 21	+19	13.552 229	14.172
7.371	0.8511		+460	9.179 21	-12	13.323 234	[ 14.428 251
8.368	0.8539	0.88093	+379	9.200 21	-42	13.089	14.079
9.366	0.8566	0.88341	+249	9.221 21	<u>60</u>	12.851	14.920
10.363	0.8593	0.88593 255	+ 94	9.242 21	66	12.609 245	15.169 238
11.360	0.8621	+0.88848 258	— 61	+9.263 22	-64	+12.364 250	+15.407 233
12.357	0.8648	0.80100	-197	9.285 21	<u>-50</u>	12.114	15.640
13.355	0.8675	0.89367 264	-297	9.306 21	-28	11.801	15.869 225
14.352	0.8702	0.89631 266	-348	9.327 20	- 3	11.604 261	16.094 220
15.349	0.8730	0.89897 270	-348	9.347 21	+25	11.343 264	16.314 215
16.347	0.8757	0.90167 273	-292	9.368 20	+49	11.079 268	16.529 209
17.344	0.8784	+0.90440 276	-191	+9.388	+63	+10.811 271	+16.738 204
18.341	0.8812	0.90716 279	<b>— 59</b>	9.408	+67	10.540	16.942
19.338	0.8839	0.90995 282	+ 76	9.427	+58	10.265 278	17.141 194
20.336	0.8866	0.91277 286	+185	9.446	+35	9.987 281	17.335 188
21.333	0.8894	0.91563 288	+236	9.465 18	+ 3	9.706 284	17.523 183
22.330	0.8921	+0.91851	+216	+9.483	-30	+9.422	+17.706
22.550	0.0921	0.91051	1 210	9.403	30	7.442	127.700

# Reduktionsgrößen 1940 für 12<sup>h</sup> Sternzeit Greenwich

Welt	t-Zeit	t	A	A'	В	B'	C	D
10	940					in o.oor		
	22.330	0.8921	+0.91851	in o.00001 +216	+9.483 18	-3°	+9.422 287	+17.706
	23.327	0.8948	0.02141	+124	9.501 18	-59	O T 2 F	TH VV4
	24.325	0.8975	0.02425	- 19	9.519 18	-73	8845	18.057 167
	25.322	0.9003	0.02721	-173	0.527	-7°	8 552 -93	TV 004
	26.319	0.9030	0.93030	-300	9.537 17	-51	8 256 290	TQ 28F
	27.316	0.9057	404		9.554 17		7 057 299	18 541
			0.93333 304	-358	9.571 17	-17	7.957 <sub>301</sub>	18.541 150
	28.314	0.9085	+0.93637 306	-329	+9.588 16	+20	$+7.656_{303}$	+18.691
	29.311	0.9112	0.93943 309	-213	9.604	+53	7.353 306	18.835
_	30.308	0.9139	0.94252 312	<b>— 40</b>	9.619	+75	7.047 309	18.974
Dez.	1.306	0.9167	0.94564	+151	9.634	+-74	6.738 311	19.107 126
	2.303	0.9194	0.94878 316	+322	9.648	+6 <b>1</b>	6.427	19.233 120
	3.300	0.9221	0.95194 318	+432	9.662	+34	6.115 314	19.353 114
	4.297	0.9249	+0.95512 319	+465	+9.675	0	+5.801 316	+19.467 109
	5.295	0.9276	0.95831	+420	9.688	-29	5.485 318	19.576 103
	6.292	0.9303	0.96152 323	+313	9.700	-56	5.167 321	19.679 97
	7.289	0.9330	0.06475	+163	9.711	-67	$4.846 \frac{321}{322}$	19.776 90
	8.286	0.9358	0.96799 324	+ 4	9.722	68	4.524 323	19.866 84
	9.284	0.9385	0.97125 328	-147	9.732	<del>-57</del>	4.201 324	19.950 78
	10.281	0.9412	+0.97453 329	-265	+9.742	-38	+3.877 326	+20.028
	11.278	0.9440	0.07782	-333	9.751 8	-10	3.551 327	20.100 65
	12.276	0.9467	0.98112 330	-351	9.759 8	+16	3.224 328	20.165
	13.273	0.9494	0.98444	-310	9.767	+42	2.896 329	20.224 59
	14.270	0.9522	0.08776	218	9.774	+61	2 567	20.277 53
	15.267	0.9549	0.99110 334	<b>— 89</b>	9.781	+71	2.237 330	20.323 40
	16.265	0.9576	+0.99445 335	+ 51	+0.786	-+-63	+1.906 331	+20.363 34
	17.262	0.9603	0.00780	+175	9.791	+43	T 575	20.397 27
	18.259	0.9631	1.00116 336	+252	0.705	+14	1.244 332	20.424 21
	19.256	0.9658	1.00452	+258	9.798 3	—ı8	0.012	20.445
	20.254	0.9685	1.00788 336	+192	9.800 2	48	0.579 333	20.459 8
	21.251	0.9713	1.01125 337	+ 61	9.802	-68	$+0.246\frac{333}{333}$	20.467 2
100	22.248	0.9740	+1.01462	- 93	+9.803	-73	-0.087	+20.460
	23.245	0.9767	1.01700 337	-240	0.804	-57	0.410	20 464
	24.243	0.9795	T 02726 33/	-333	0.804	-32	0.752	20 452
	25.240	0.9822	T 02472 330	<del>-349</del>	0.802	+ 4	T 085 333	20.425
	26.237	0.9849	T 02808 330	-276	0.801	+38	T 417	20.411
	27.235	0.9877	1 02144 330	-136	0.700	+65	T 740 334	20.28T
	28.232	0.9904	±1 02470	+ 45	+9.796	+75	-2 OST	+20.244
	20.232	0.9931	1.03813	+222		+75 +70	2 472 331	20 201
	, ,	,,,	- 111		9.792 4	1	1119	- 50
	30.226	0.9958	1.04146 332	+360	9.788 5	+46	2.742 329	20.251 57
	31.224	0.9986	1.04478 331 +1.04809	+432 +427	9.783 6	+16 -16	$3.071_{328}$ $-3.399$	20.194 62 +20.132
				1 -177	+9.777	1 (1)	4, 400	1 70.16%

# Übertragung mittlerer Sternörter von dem Äquinoktium $t_1$ auf $t_2 = 1940.0$

t <sub>1</sub>	$m^{\rm e}(t_2{-}t_1)$	$n(t_2 - t_1)$	$n^{\prime\prime}(t_2-t_1)$	$\log \ n''(t_2-t_1)$	$\log n''(t_2-t_1)$
1755	+9 28.201	+247.300	+3709.49	2.393223	3.569314
1790	7 40.753	200.498	3007.47	2.302111	3.478202
1800	7 10.049	187.128	2806.91	2.272138	3.448229
1810	6 39.343	173.758	2606.37	2.239944	3.416035
1825	5 53.281	153.704	2305.56	2.186685	3.410035
1830	+5 37.926	+147.020	+2205.29	2.167375	3.343466
1835	5 22.571	140.335	2105.03	2.147167	3.323258
1840	5 7.215	133.651	2004.77	2.125973	3.302064
1845	4 51.859	126.967	1904.51	2.103692	3.279783
1850	4 36.502	120.284	1804.25	2.080207	3.256298
1855	+4 21.145	+113.600	+1704.00	2.055378	3.231469
1860	4 5.787	106.917	1603.75	2.029045	3.205136
1865	3 50.429	100.233	1503.50	2.001012	3.177103
1870	3 35.070	93.550	1403.25	1.971044	3.147135
1875	3 19.711	86.867	1303.00	1.938854	3.114945
1880	+3 4.351	+ 80.184	+1202.76	1.90409	3.080179
1885	2 48.991	73.501	1102.52	1.86629	3.042385
1890	2 33.631	66.819	1002.28	1.82490	3.000988
1895	2 18.270	60.136	902.04	1.77914	2.955226
1900	2 2.908	53-454	801.80	1.72798	2.904069
1905	+r 47.546	+ 46.772	+ 701.57	1.66998	2.84607
1910	1 32.184	40.089	601.34	1.60303	2.77912
1915	1 16.821	33.408	501.11	1.52384	2.69993
1920	1 1.458	26.726	400.88	1.42693	2.60302
1925	0 46.094	20.044	300.66	1.30199	2.47808
1930	+0 30.730	+ 13.363	+ 200.44	1.12589	2.30198
1935	0 15.365	6.681	100.22	0.82485	2.00094
1940	0 0.000	0.000	0.00	<b> </b> − ∞	_ ∞

Sind  $\alpha_1$ ,  $\delta_1$  die Koordinaten für  $t_1$  und  $\alpha_2$ ,  $\delta_2$  jene für  $t_2=1940.0$ , ist ferner  $\alpha'$ ,  $\delta'$  der genäherte Sternort für die Zeit

$$\frac{1}{2}(t_1+t_2),$$

so ist

$$\begin{aligned} &\alpha_2 = \alpha_1 + m^s(t_2 - t_1) + [n^s(t_2 - t_1)] \sin \alpha' \text{ tg } \delta' \\ &\delta_2 = \delta_1 + [n''(t_2 - t_1)] \cos \alpha' \end{aligned}$$

Übertragung mittlerer Polsternörter von dem Äquinoktium  $t_1$  auf  $t_2 = 1940.0$ 

$t_1$	90°-	-(N)	(m) +	·(N)—90°		(n)	
	,	**		, ,,		, ,	
1755	+71	•		1 2.98		1 49.23	
1790	57	34.82	5	7 36.60	_	0 7.33	
1800	53	44.64	5	3 46.19		6 46.80	
1810	49	54.44	4	9 55.78	4	3 26.27	
1825	44	9.11	4	4 10.16	3	8 25.49	
1830	+42	13.99	-+-4	2 14.95	+3	6 45.24	
1835	40	18.86	4	.0 19.74	3	5 4.98	
1840		23.73	3	8 24.53	3	3 24.72	
1845	36	28.60	3	6 29.31	3	1 44.47	
1850	34	33.45	3	34.10	3	0 4.22	
1855	+32	38.31	+-3	38.88		8 23.97	
1860	30	43.16	3	0 43.66	2	6 43.73	
1865	28	48.00	2	8 48.44	2	5 3.48	
1870	26	52.83	2	6 53.22	2	3 23.23	
1875	24	57.66	2	4 58.00	2	1 42.99	
1880	+23	2.50	+2	3 2.78	+2	0 2.75	
1885	21	7.32	2	1 7.56	I	8 22.51	
1890	19	12.13	I	9 12.33	I	6 42.27	
1895	17	16.94	1	7 17.10	I	5 2.04	
1900	15	21.75	1	5 21.88	I	3 21.80	
1905	+13	26.55	+1	3 26.65	+1	1 41.57	
1910	II	31.35	3	1 31.42	I	0 1.34	
1915	9	36.13		9 36.18		8 21.11	
1920	7	40.92		7 40.95		6 40.89	
1925	5	45.70		5 45.71		5 0.66	
1930	+ 3	50.47	+	3 50.48	-+-	3 20.44	
1935	I	55.24		1 55.24		1 40.22	
1940	0	0.00		0.00		0.00	

Sind  $\alpha_1$ ,  $\delta_1$  die Koordinaten für  $t_1$  und  $\alpha_2$ ,  $\delta_2$  jene für  $t_2 = 1940.0$ , so hat man zur Reduktion von dem Äquinoktium | zur Reduktion von dem Äquinoktium  $t_1$  auf  $t_2$ :

$$a_{1} = \alpha_{1} + [90^{\circ} - (N)]$$

$$p_{1} = \left(\tan \beta_{1} + \cos a_{1} \tan \beta_{\frac{1}{2}}(n)\right) \sin (n)$$

$$\tan \beta_{1} = \frac{p_{1} \sin a_{1}}{1 - p_{1} \cos a_{1}}$$

$$\alpha_{2} = a_{1} + [(m) + (N) - 90^{\circ}] + \Delta a_{1}$$

$$\tan \beta_{\frac{1}{2}}(\delta_{2} - \delta_{1}) = \cos (a_{1} + \frac{1}{2} \Delta a_{1}) \sec \beta_{\frac{1}{2}} \Delta a_{1} \tan \beta_{\frac{1}{2}}(n)$$

$$a_{2} = \alpha_{2} - [(m) + (N) - 90^{\circ}]$$

$$p_{2} = -\left(\tan \beta_{2} - \cos a_{2} \tan \frac{1}{2}(n)\right) \sin(n)$$

$$\tan \Delta a_{2} = \frac{p_{1} \sin a_{2}}{1 - p_{2} \cos a_{2}}$$

$$\alpha_{1} = a_{2} - [90^{\circ} - (N)] + \Delta a_{2}$$

$$\tan \frac{1}{2} (\delta_{1} - \delta_{2}) = -\cos\left(a_{2} + \frac{1}{4} \Delta a_{2}\right) \sec \frac{1}{4} \Delta a_{2} \tan \frac{1}{4}(n)$$

Reduktion von Koordinatendifferenzen scheinbarer Örter auf Differenzen mittlerer Örter für den Jahresanfang.

Sind  $\Delta\alpha$  und  $\Delta\delta$  die gemessenen Koordinatendifferenzen der scheinbaren Örter im Sinne Objekt minus Stern,  $d\Delta\alpha$  und  $d\Delta\delta$  die an ihnen anzubringenden Korrektionen, um Koordinatendifferenzen zu erhalten, die sich auf das mittlere Äquinoktium des Jahresanfangs beziehen, so wird

$$d\,\Delta\,lpha = (d\,\Delta\,lpha)_1 + (d\,\Delta\,lpha)_2 \ d\,\Delta\,\delta = (d\,\Delta\,\delta)_1 + (d\,\Delta\,\delta)_2,$$

wobei

$$egin{aligned} (d\Deltalpha)_1 &= -j\cos\left(G+lpha
ight)rac{ ext{tg}\,\delta}{15}\,\Deltalpha^{ ext{m}} - j\sin\left(G+lpha
ight)rac{\sec^2\delta}{225}\,\Delta\delta' \ (d\Deltalpha)_2 &= -k\cos\left(H+lpha
ight)rac{\sec\delta}{15}\,\Deltalpha^{ ext{m}} - k\sin\left(H+lpha
ight)rac{ ext{tg}\,\delta\sec\delta}{225}\,\Delta\delta' \ (d\Delta\delta)_1 &= j\sin\left(G+lpha
ight)\Deltalpha^{ ext{m}} \ (d\Delta\delta)_2 &= k\sin\left(H+lpha
ight)\sin\delta\Deltalpha^{ ext{m}} - k\cos\left(H+lpha
ight)rac{\cos\delta}{15}\,\Delta\delta' \ &+ \left[ 0.0003\,i\sin\delta\Delta\delta' \right] \end{aligned}$$

Hierin bezeichnen  $(d\Delta\alpha)_1$  und  $(d\Delta\delta)_1$  den Einfluß der Präzession und Nutation,  $(d\Delta\alpha)_2$  und  $(d\Delta\delta)_2$  den Einfluß der Aberration.

Die Größen G, H, j, k, i sind auf S.  $238^*-255^*$  zu finden. Die Faktoren  $\frac{1}{15}$  tg  $\delta$ ,  $\frac{1}{225}$  sec  $\delta$ ,  $\frac{1}{15}$  sec  $\delta$ ,  $\frac{1}{225}$  tg  $\delta$  sec  $\delta$ , sin  $\delta$ ,  $\frac{1}{15}$  cos  $\delta$  entnehme man der Zusammenstellung auf S.  $268^*$ . Die numerischen Werte der Funktionen sinus und cosinus sind auf S.  $269^*$  enthalten.  $\Delta \alpha^m$  bedeutet die in Zeitminuten ausgedrückte gemessene Rektaszensionsdifferenz,  $\Delta \delta'$  ist die in Bogenminuten ausgedrückte gemessene Deklinationsdifferenz. Die Größen  $d\Delta\alpha$  und  $d\Delta\delta$  ergeben sich in Zeit- bzw. Bogensekunden. Das in eckige Klammern gesetzte Glied 0.0003 i sin  $\delta\Delta\delta'$  in der Formel für  $(d\Delta\delta)_2$  beträgt für  $\Delta\delta'=\text{ro}'$  im Maximum o''.02 und kann daher in den meisten Fällen unberücksichtigt bleiben.

8	$\frac{1}{15} \operatorname{tg} \delta$	$\frac{1}{225} \sec^2 \delta$	$\frac{1}{15}\sec\delta$	$\frac{1}{225}$ tg $\delta$ sec $\delta$	sin 8	$\frac{1}{15}\cos\delta$	tg δ	$\frac{1}{15} \sec^2 \delta$	δ
o°	0.000	0.004	0.067	0.000	0.00	0.07	0.00	0.07	o°
5	0.006	0.004	0.067	0.000	0.09	0.07	0.09	0.07	5
10	0.012	0.005	0.068	0.001	0.17	0.07	0.18	0.07	10
15	0.018	0.005	0.069	0.001	0.26	0.06	0.27	0.07	15
20	0.024	0.005	0.071	0.002	0.34	0.06	0.36	0.08	20
25	0.031	0.005	0.074	0.002	0.42	0.06	0.47	0.08	25
30	0.038	0.006	0.077	0.003	0.50	0.06	0.58	0.09	30
35	0.047	0.007	0.081	0.004	0.57	0.05	0.70	0.10	35
40	0.056	0.008	0.087	0.005	0.64	0.05	0.84	0.11	40
40°	0.056	0.008	0.087	0.005	0.64	0.05	0.84	0.11	40°
42	0.060	0.008	0.090	0.005	0.67	0.05	0.90	0.12	42
44	0.064	0.009	0.093	0.006	0.69	0.05	0.97	0.13	44
46	0.069	0.009	0.096	0.007	0.72	0.05	1.04	0.14	46
48	0.074	0.010	0.100	0.007	0.74	0.04	I.II	0.15	48
50	0.079	0.011	0.104	0.008	0.77	0.04	1.19	0.16	50
52	0.085	0.012	0.108	0.009	0.79	0.04	1.28	0.18	52
54	0.092	0.013	0.113	0.010	.0.81	0.04	1.38	0.19	54 -6
56	0.099	0.014	0.119	0.012	0.83	0.04	1.48	0.21	56
58	0.107	0.016	0.126	0.013	0.85	0.04	1.60	0.24	58 60
60	0.115	0.018	0.133	0.015	0.87	0.03	1.73	0.27	
60°	0.115	0.018	0.133	0.015	0.87	0.03	1.73	0.27	60°
61	0.120	0.019	0.138	0.017	0.87	0.03	1.80	0.28	61
62	0.125	0.020	0.142	0.018	0.88	0.03	1.88	0.30	62
63	0.131	0.022	0.147	0.019	0.89	0.03	1.96	0.32	63
64	0.137	0.023	0.152	0.021	0.90	0.03	2.05	0.35	64
65	0.143	0.025	0.158	0.023	0.91	0.03	2.14	0.37	65
66	0.150	0.027	0.164	0.025	0.91	0.03	2.25	0.40	66
67	0.157	0.029	0.171	0.027	0.92	0.03	2.36	0.44	67 68
68	0.165	0.032	0.178	0.029	0.93	0.02	2.48	0.48	
69	0.174	0.035	0.186	0.032	0.93	0.02	2.61	0.52	69
70	0.183	0.038	0.195	0.036	0.94	0.02	2.75	0.57	70.
71	0.194	0.042	0.205	0.040	0.95	0.02	2.90 3.08	0.70	71
72	0.205	0.047	0.210	0.044 0.050	0.95	0.02	3.27	0.78	72:
73 74	0.232	0.052	0.242	0.056	0.96	0.02	3.49	0.78	73 74
75	0.249	0.066	0.258	0.064	0.97	0.02	3.73	1.00	75
-13	0.249			-	91				0
75.0	0.249	0.066	0.258	0.064	0.97	0.02	3.73	1.00	75.0
75.5	0.258	0.071	0.266	0.069	0.97	0.02	3.87	1.06	75.5
76.0	0.267	0.076	0.276	0.074	0.97	0.02	4.01	1.14	76.0
76.5	0.278	0.082	0.286	0.079	0.97	0.02	4.17	1.22	76.5
77.0	0.289	0.088	0.296	0.086	0.97	0.01	4.33	1.32	77.0
77.5	0.301	0.095	0.308	0.093	0.98	10.0	4.51	1.42	77.5
78.0	0.314	0.103	0.321	0.101	0.98	0.01	4.70	1.54	78.0
78.5	0.328	0.112	0.334	0.110	0.98	0.01	4.92	1.68	78.5
79.0	0.343	0.122	0.349	0.120	0.98	0.01	5.14	1.83	79.0
79.5	0.360	0.134	0.366	0.132	0.98	0.01	5.40	2.01	79.5
80.0	0.378	0.147	0.384	0.145	0.98	0.01	5.67	2.21	80.0

		Sant	Si	nus	433		269*
	o <sup>h</sup>	1 h	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	1
0m	0.000	0.259	0.500	0.707	0.866	0.966	60
I	0.004	0.263	0.504	0.710	0.868	0.967	59
2	0.009	0.267	0.508	0.713	0.870	0.968	58
3	0.013	0.271	0.511	0.716	0.872	0.969	57
4	0.017	0.276	0.515	0.719	0.875 0.877	0.970	56
5	0.022	0.284	0.522	0.725	0.879	0.971	55 54
7	0.031	0.288	0.526	0.728	0.881	0.973	53
8	0.035	0.292	0.530	0.731	0.883	0.974	52
9	0.039	0.297	0.534	0.734	0.885	0.975	51
10	0.044	0.301	0.537	0.737	0.887	0.976	50
11	0.048	0.305	0.541	0.740	0.889	0.977	49
12	0.052	0.309	0.545	0.743	0.891	0.978	48
13	0.057 0.061	0.313	0.548	0.746	0.893	0.979	47 46
14	0.065	0.31/	0.552 0.556	0.749	0.897	0.980	45
16	0.070	0.326	0.559	0.755	0.899	0.982	44
17	0.074	0.330	0.563	0.758	0.901	0.982	43
18	0.078	0.334	0.566	0.760	0.903	0.983	42
19	0.083	0.338	0.570	0.763	0.904	0.984	41
20	0.087	0.342	0.574	0.766	0.906	0.985	40
21	0.092	0.346	0.577	0.769	0.908	0.986	39
22	0.096	0.350	0.581	0.772	0.910	0.986	38
23 24	0.100	0.354	0.584	0.774 0.777	0.912	0.987 c.988	37 36
25	0.109	0.362	0.591	0.780	0.915	0.988	35
26	0.113	0.367	0.595	0.783	0.917	0.989	34
27	0.118	0.371	0.598	0.785	0.919	0.990	33
28	0,122	0.375	0.602	0.788	0.921	0.990	32
29	0.126	0.379	0.605	0.791	0.922	0.991	31
30	0.131	0.383	0.609	0.793	0.924	0.991	30
31	0.135	0.387	0.612	0.796	0.926	0.992	29
32	0.139	0.391	0.616	0.799 0.801	0.927	0.993	28
33 34	0.148	0.399	0.623	0.804	0.929	0.993	26
35	0.152	0.403	0.626	0.806	0.932	0.994	25
36	0.156	0.407	0.629	0.809	0.934	0.995	24
37	0.161	0.411	0.633	0.812	0.935	0.995	23
38	0.165	0.415	0.636	0.814	0.937	0.995	22
39	0.169	0.419	0.639	0.817	0.938	0.996	21
40	0.174	0.423	0.643	0.819	0.940	0.996	20
41	0.178 0.182	0.427	0.646	0.822	0.941	0.997	19
42 43	0.187	0.431	0.653	0.824	0.943	0.997	17
44	0.191	0.434	0.656	0.829	0.946	0.997	16
45	0.195	0.442	0.659	0.831	0.947	0.998	15
46	0.199	0.446	0.663	0.834	0.948	0.998	14
47	0.204	0.450	0.666	0.836	0.950	0.998	13
48	0.208	0.454	0.669	0.839	0.951	0.999	12
49	0.212	0.458	0.672	0.841	0.952	0.999	11
50	0.216	0.462	0.676	0.843	0.954	0.999	10
51 52	0.221	0.466	0.6 <del>7</del> 9 0.682	0.846 0.848	0.955	0.999	9 8
53	0.229	0.473	0.685	0.850	0.958	1.000	
54	0.233	0.477	0.688	0.853	0.959	1.000	7 6
55	0.238	c.481	0.692	0.855	0.960	1.000	5
56	0.242	0.485	0.695	0.857	0.961	1.000	4
57	0.246	0.489	0.698	0.859	0.962	1.000	3
58	0.250	0.492	0.701	0.862	0.964	1.000	2 I
59 60	0.255	0.496	0.704	0.864	0.965	1,000	0m
	- 0.259 5 <sup>h</sup>	0.500	0.707	2h	1 h	oh	
	5"	4 <sup>h</sup>	3 <sup>h</sup>	2"	1-	0	

Cosinus

Übertragung von Rektaszensions- und Deklinationsdifferenzen vom mittleren Äquinoktium 1940.0 auf das Normaläquinoktium 1950.0

α	$a_1$	$a_2$	$d_1$	α	α	$a_1$	$a_2$	$d_1$	α
0 10									h m
0 O	+0.0583+	+0.0000-	-0.000+	h m	6 o	-0.0000-	+0.0583-	-0.875+	18 o
10	0582	0025	038	50	10	0025	0582	874	50
20	0581	0051	076	40	20	0051	0581	871	40
30	0578	0076	114	30	30	0076	0578	867	30
40	0574	0101	152	20	40	0101	0574	861	20
50	0569	0126	189	10	50	0126	0569	854	10
1 0	+0.0563+	+0.0151-	-o.226+	23 0	7 0	-0.0151-	+0.0563-	-o.845+	17 0
10	0556	0175	263	50	10	0175	0556	834	50
20	0548	0199	299	40	20	0199	0548	822	40
30	0539	0223	335	30	30	0223	0539	808	30
40	0528	0246	370	20	40	0246	0528	793	20
50	0517	0269	404	10	50	0269	0517	776	10
2 0	+0.0505+	+0.0291-	-0.437+	22 0	8 0	-0.0291-	+0.0505-	-o.757+	16 0
10	0492	0313	470	50	10	0313	0492	738	50
20	0478	0334	502	40	20	0334	0478	716	40
30	0463	0355	532	30	30	0355	0463	694	30
40	0447	0375	562	20	40	0375	0447	670	20
50	0430	0394	591	10	50	0394	0430	645	10
3 0	+o.0412+	+0.0412-	-0.618+	21 0	9 0	-0.0412-	+0.0412-	-o.618+	15 0
10	0394	0430	645	50	10	0430	0394	591	50
20	0375	0447	670	40	20	0447	0375	562	40
30	0355	0463	694	30	30	0463	0355	532	30
40	0334	0478	716	20	40	0478	0334	502	20
50	0313	0492	738	10	50	0492	0313	470	10
4 0	+0.0291+	+0.0505-	-0.757+	20 0	10 0	-o.o5o5-	+0.0291-	-0.437+	14 0
10	0269	0517	776	50	10	0517	0269	404	50
20	0246	0528	793	40	20	0528	0246	370	40
30	0223	0539	808	30	30	0539	0223	335	30
40	0199	0548	822	20	40	0548	0199	299	20
50	0175	0556	834	10	50	0556	0175	263	10
5 0	+0.0151+	+0.0563-	-0.845+	19 0	11 0	-0.0563-	+0.0151-	-0.226+	13 0
10	0126	0569	854	50	10	0569	0126	189	50
20	0101	0574	861	40	20	0574	0101	152	40
30	0076	0578	867	30	30	0578	0076	114	30
40	0051	0581	871	20	40	0581	0051	076	20
50	0025	0582	874	10	50	0582	0025	038	10
6 0	+0.0000+	+0.0583-	-o.875+	18 0	12 0	-o.o <sub>5</sub> 8 <sub>3</sub> -	+0.0000-	-0.000+	12 0

Für α zwischen 12h und 24h gelten die Vorzeichen zur Rechten.

$$\begin{split} &\Delta\alpha_{1950.0}\!=\!\Delta\alpha_{1940.0}\!+\!a_1\cdot\operatorname{tg}\delta\cdot\Delta\alpha^{\mathrm{m}}+a_2\cdot\frac{\mathbf{1}}{15}\sec^2\!\delta\cdot\Delta\delta';\\ &\Delta\delta_{1950.0}\!=\!\Delta\delta_{1940.0}\!+\!d_1\cdot\Delta\alpha^{\mathrm{m}} \end{split}$$

 $\Delta\alpha^m$  bedeutet die Rektaszensionsdifferenz in Zeitminuten,  $\Delta\delta'$  ist die Deklinationsdifferenz in Bogenminuten.

Die Werte von tg  $\delta$  und  $\frac{1}{15} \sec^2 \delta$  sind auf S. 268\* enthalten.

Reduktion vom mittleren Äquinoktium 1950.0 auf das jedesmalige wahre Äquinoktium

01 Welt-	- 1	f	log g	G	O <sup>h</sup> Welt-Zei	t	f	log g	G
194	.0				1940				
Jan.	-3	<b>—30.288</b>	2.29610	h m s		30	-28.895	2.27576	11 48 31
oun.	+2	30.236	2.29535	11 49 40	<b>-</b> '	5	28.846	2.27503	11 48 31
	7	30.185	2.29353	11 49 40		0	28.799	2.27431	11 48 32
	12	30.135	2.29389	11 49 42		5	28.752	2.27360	11 48 35
	17	30.087	2.29320	11 49 45		20	28.707	2.27291	11 48 38
	22	-30.041	2.29253	11 49 49		25	-28.664	2.27225	11 48 42
Febr.	27	29.997	2.29189	11 49 53		30	28.623	2.27162	11 48 46
rebr.	I	29.956	2.29128	11 49 58	Aug.	4	28.583	2.27101	11 48 51
	6	29.917 29.881	2.29071	11 50 3		9	28.546 28.511	2.27043	11 48 56
	II	29.001	2.29017	11 50 7		[4	20.511	2.20900	11 49 1
	16	-29.847	2.28967	11 50 12	3	19	-28.478	2.26937	11 49 6
	21	29.815	2.28920	11 50 17	2	24	28.447	2.26890	11 49 11
	26	29.785	2.28877	11 50 21		29	28.418	2.26845	11 49 15
März	2	29.757	2.28836	11 50 24	Sept.	3	28.390	2.26802	11 49 19
	7	29.731	2.28798	11 50 26		8	28.364	2.26762	11 49 21
	12	-29.706	2.28761	11 50 27	,	13	-28.339	2.26723	11 49 23
	17	29.682	2.28726	11 50 26		18	28.315	2.26686	11 49 24
	22	29.658	2.28692	11 50 25		23	28.291	2.26650	11 49 23
	27	29.634	2.28657	11 50 23		28	28.267	2.26614	11 49 21
April	I	29.609	2.28622	11 50 19	Okt.	3	28.243	2.26577	11 49 18
	6	an #0 4	0.00-0-				20 270	6	
	6	-29.584	2.28585	11 50 15		8	-28.219	2.26539	11 49 14
	11	29.557 29.529	2.28505	11 50 9		13 18	28.193 28.165	2.26458	11 49 9
	21		2.28462	11 50 2			28.136	2.26414	11 49 3
	26	29.499 29.468	2.28416	11 49 55 11 49 47		23 28	28.105	2.26367	11 48 48
	20	29,400		11 49 47		20	20.105		11 40 40
Mai	I	-29.434	2.28367	11 49 39	Nov.	2	-28.071	2.26316	11 48 40
	6	29.398	2.28315	11 49 30		7	28.035	2.26262	11 48 31
	II	29.359	2.28260	11 49 22		12	27.996	2.26204	11 48 22
	16	29.319	2.28202	11 49 14		17	27.955	2.26141	11 48 13
	21	29.277	2.28141	11 49 6	2	22	27.912	2.26075	11 48 5
	26	-29.233	2.28077	11 48 59	:	27	-27.866	2.26006	11 47 57
	31	29.187	2.28010	11 48 52	Dez.	2	27.819	2.25933	11 47 50
Juni	5	29.140	2.27940	11 48 46		7	27.770	2.25857	11 47 43
	10	29.092	2.27869	11 48 40	1	12	27.719	2.25779	11 47 38
	15	29.043	2.27796	11 48 36	2	17	27.668	2.25699	11 47 35
	20	-28.994	2.27723	11 48 33	2	22	-27.616	2.25618	11 47 32
	25	28.944	2.27649	11 48 32	2	27	27.564	2.25536	11 47 31
	30	-28.895	2.27576	11 48 31		32		2.25454	11 47 31
	D:		4.1 1					t t D.	

Die mit den vorstehend gegebenen Größen f,  $\log g$  und G berechnete Reduktion vom mittleren Äquinoktium 1950.0 auf das wahre Äquinoktium der Epoche bedarf noch einer Verbesserung, die von dem Einfluß der Variatio saccularis herrührt und auf Seite 272\* und 273\* enthalten ist. Es wird somit: Red. in  $\alpha = f + \frac{1}{15}g\sin(G + \alpha)$  tg  $\delta$  + Korr. nach S. 272\*

Red. in  $\delta = g \cos (G + \alpha) + \text{Korr. nach S. 273*}$ 

Korrektion der Reduktion vom mittleren Äquinoktium 1950.0 auf das jedesmalige wahre Äquinoktium (s. S. 271\*), berechnet für 1940.0, mit Hinzufügung ihrer einjährigen Änderung.

#### Für Rektaszension (in o.oo1)

				δ				
α	+60°	+50°	+30°	-+10°	—10°	-30°	—50°	-60°
h								
0	+27 -5	<del>+19 -4</del>	+10 -2	+4 −1	<u>-2</u> 0	- 8 +2	-17 +3	-25 +5
1	+37 -7	+24 -5	+12 -2	+5 -1	0 0	— 5 +r	-10 +2	-13 +3
2	+43 -9	+27 -5	+13 -3	-+-6 −r	+2 O	— 2 O	-3 + 1	<u> </u>
3	+42 -8	+26 -5	+12 -2	+6 —ı	+3 - 1	0 0	+ 1 o	+ 6 -1
4	+33 -7	+20 -4	+10 -2	+5 -1	+3 -1	+ 1 0	+ 3 -1	+ 8 -2
5	+19 -4	+11 -2	+ 6 -r	+3 -1	+2 O	+ 2 0	+ 3 - 1	+ 6 - 1
6	0 0	+ 1 0	+ I 0	+1 o	-+1 o	+- I O	+ I O	+ 1 o
7	-18 +4	-10 +2	-4 + 1	<u>-2</u> 0	0 0	+ I O	0 0	-3 + 1
8	-32 +6	-19 +4	— 8 <b>+-2</b>	-3 + 1	—I o	+ 1 0	— I o	-5 + 1
9	<b>−40</b> +8	-24 + 5	-11 +2	-4 +I	— <b>I</b> 0	+ 2 0	+10	— 3 +ı
10	-41 +8	-25 +5	-II +2	-4 + 1	0 0	+ 4 -I	+ 6 —ı	+ 4 -1
11	-36 +7	-23 +5	-10 +2	-3 + 1	+2 o	+ 7 -I	+12 -2;	+15 -3
12	-25 + 5	-17 +3	— 8 →2	<u>-2</u> 0	+4 -I	+10 -2	+19 -4	+27 -5
13	-13 +3	—ro +2	-5 + 1	0 0	+5 -I	+12 -2	+24 -5	+37 -7
14	<u> </u>	-3 + 1	- 2 o	+-2 0	+6 —I	+13 -3	$+27 -5^{3}$	+43 -9
15	+ 6 -I	+ 1 0	0 0	+3 -I	+6 -I	+12 -2	+26 -5	+42 -8
16	+8 -2	+ 3 -1	+ I o	+3 -1	+5 -r	+10 -2	+20 -4	+33 -7
17	+ 6 -r	+ 3 -1	+ 2 0	+2 0	+3 -1	+ 6 -r	+11 -2	+19 -4
18	+ I 0	+ r o	+ I 0	+1 0	+I 0	+ 1 0	+ 1 o	0 0
19	-3 + 1	0 0	+ 1 0	0 0	<u>-2</u> 0	- 4 +I	-10 +2	-18 + 4
20	- 5 +I	- I 0	+ r o	I 0	-3 + 1	- 8 + <sub>2</sub>	-19 +4	-32 +6
21	-3 + 1	+10	+ 2 0	-I 0	-4 + 1	-11 +2	-24 + 5	<b>-</b> 40 +8
22	+ 4 - 1	+ 6 -r	+ 4 - 1	0 0	-4 + 1	-11 + 2	-25 + 5	-41 +8
23	+15 -3	+12 -2	+ 7 - I	+2 0	-3 + 1	-10 +2	-23 + 5	-36 + 7
24	+27 -5	+19 -4	+10 -2	+4 -1	-2 0	-8 + 2	-17 + 3	-25 + 5

Korrektion der Reduktion vom mittleren Äquinoktium 1950.0 auf das jedesmalige wahre Äquinoktium (s. S. 271\*), berechnet für 1940.0, mit Hinzufügung ihrer einjährigen Änderung.

#### Für Deklination (in o''01)

					8			
α	+60°	+50°	+30°	+100	—10°	−30°	—50°	-60°
O <sup>h</sup>	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
I	- 7 +I	<b>−</b> 7 +1	- 7 +I	-6 + 1	-6 + 1	-6 + 1	— 5 <b>→</b> 1	-5 + 1
2	-16 + 3	-14 +3	-13 +3	-12 +2	—II +2	—10 +2	-9 + 2	-7 + 1
3	-25 + 5	-22 +4	-19 + 4	-17 +3	-15 + 3	-13 +3	-10 +2	-8 + 2
4	-32 +6	-28 +6	-24 + 5	-2I <del>+</del> 4	-18 + 4	15 +3	-II +2	-7 + 1
5	-37 + 8	-32 + 7	-27 + 5	-23 + 5	-20 + <sub>4</sub>	-16 + 3	-II +2	-6 + 1
6	-39 + 8	-34 + 7	-28 +6	-24 + 5	-21 +4	-17 +3	-11 +2	-5 + 1
7	-37 +7	-32 +6	-27 + 5	-23 +5	<b>−20 +4</b>	16 +-3	-11 + 2	-6 + 1
8	-32 +6	-28 +6	-23 + 5	-20 +4	—ı8 +4	-15 +3	-IO +2	-6 + 1
9	-24 +5	-21 +4	-18 +4	-16 + 3	-15 +3	-13 +3	-10 +2	-7 + 1
10	-15 + 3	-14 + 3	-I2 +2	-11 + 2	—10 <b>+</b> 2	-9 + 2	-8 + 2	-7 + 1
II	-6 + 1	- 6 +I	-6 + 1	-5 + 1	-5+r	-5 + 1	-5 + 1	-4+1
12	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
13	+ 5 - 1	+ 5 -1	+ 6 - 1	+ 6 - 1	+6-1	+ 7 -1	+ 7 -1	+ 7 <b>−1</b>
14	+ 7 -r	+9 -2	+10 -2	+II -2	+12 -2	+13 -3	+14 -3	+16 -3
15	+8-2	+10 -2	+13 -3	+15 -3	+17 -3	+19 -4	+22 -4	+25 -5
16	+ 7 -I	+II —2	+15 -3	+18 -4	+21 -4	+245	+28 -6	+32 -6
17	+ 6 -1	+11 -2	+16 -3	+20 -4	+23 -5	+27 -5	+32 -7	+37 -8
18	+ 5 - 1	+11 -2	+17 -3	+21 -4	+24 -5	+28 -6	+34 - 7	+39 -8
19	+ 6 <b>-</b> I	+11 -2	+16 -3	+20 -4	+23 -5	+27 -5	+32 -6	+37 -7
20	+ 6 -1	+10 <b>-2</b>	+15 -3	+18 -4	+20 -4	+23 -5	+28 -6	+32 -6
21	+ 7 -r	+10 -2	+13 -3	+15 -3	+16 -3	+18 <b>-</b> 4	+21 -4	+24 -5
22	+ 7 -1	+ 8 -2	+9 -2	+10 -2	+11 -2	+12 -2	+14 -3	+15 -3
23	+ 4 -1	+ 5 -1	+ 5 - 1	+ 5 -r	+ 5 <b>-1</b>	+ 6 - 1	+ 6 - 1	+ 6 - 1
24	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

$\alpha$	Oh,	12h	1h,	13h	2h,	14 <sup>h</sup>	3h, :	[ 5h	4 <sup>h</sup> ,	16 <sup>b</sup>	5 <sup>h</sup> ,	17h	α
m	+A_	+D-	+ A	+D-	+ A -	+D-	+A-	+D-	+ A -	+D-	+ A —	+D-	m
0	8	200,42	8	***	6.694	752.45	8	****	8	100,02	12.911	51.66	
I	0.015	200.43	3.473	193.54	744	173.47	9.459	141.57	11.579	99.26	926	50.81	0
2	132	200.42	585	193.08	795	172.58	541	140.32	637	98.50	940	49.97	2
3	190	200.41	641	192.84	845	172.14	582	139.70	666	97.74	955	49,12	3
4	248	200.40	697	192.60	895	171.69	622	139.07	694	96.98	969	48.27	+
5	306	200.38	753	192.36	945	171.23	663	138.44	722	96.21	983	47.42	5
6	365	200,36	809	192.11	6.994	170.78	703	137.80	75°	95.44	12.996	46.57	6
7	423	200.33	865	191.86	7.044	170.32	743	137.17	778	94.67	13.010	45.72	7 8
8	481	200.30	921	191.61	093	169.86	783	136.53	805	93.90	023	44.87	
9	540_	200.27	3-977	191.35	143	169.39	822	135.89	832	93.13	036	44.02	9
10	0.598	200.23	4.032 088	191.09	7.192	168.92	9.862	135.24	11.859	92.35	13.049	43.16	IO
12	656 714	200.19	143	190.55	241 290	168.45	901 940	134.60	912	91.57	°73	42.31	11
13	772	200.09	199	190.33	339	167.49	9.979	133.30	939	90.79	085	40,60	13
14	831	200.04	254	190.00	387	167.01	10.017	132.64	965	89.23	097	39.74	14
15	889	199.99	309	189.72	436	166.53	056	131.99	11.991	88.45	108	38.88	15
16	0.947	199.93	364	189.44	484	166.04	94	131.33	12.016	87.66	119	38.02	16
17	1.005	199.86	419	189.15	533	165.55	132	130.66	042	86.88	. 130	37.17	17
18	063	199.80	474	188,86	581	165.05	170	130.00	067	86.09	141	36.31	18
19	121	199.72	529	188.56	629	164.56	208	129.33	092	85.30	151	35-45	19
20	1.179	199.65	4.584	188.27	7.676	164.05	10.246	128.66	12,116	84.50	13.162	34.58	20
21	238	199.57	639	187.96	724	163.55	283	127.99	141	83.71	172	33-72	21
22	296	199.49	693	187.66	772	163.04	320	127.32	165	82.91	181	32.86	22
23 24	354 412	199.40	748 802	187.35	819 866	162.53	357	120.04	189	82.12	191	32.00	23
25	470	199.31	857	186.72	913	161.50	394 430	125.90	236	80.52	200	30.27	25
26	528	199.12	911	186.40	7.960	160.99	466	124.60	260	79.72	217	29.40	26
27	585	199.02	4.965	186.08	8.007	160.46	503	123.91	283	78.91	226	28.54	27
28	643	198.91	5.019	185.75	053	159.94	539	123.22	306	78.11	234	27.67	28
29	701	198.80	073	185.42	100	159.41	574	122.53	328	77.30	242	26.81	29
30	1.759	198.69	5.127	185.09	8.146	158.88	10.610	121.84	12.351	76.49	13.250	25.94	30
31	817	198.57	181	184.75	192	158.34	645	121.14	373	75.69	257	25.07	31
32	874	198.45	235	184.41	238	157.80	680	120,44	395	74.88	264	24.20	32
33	932	198.32	288	184.07	284	157.26	715	119.74	416	74.06	271	23.34	33
34	1.990	198.20	342	183.72	330	156.72	748	119.04	438	73.25	278 284	22.47	34
35 36	2.047	197.93	395 448	183.01	375 421	155.62	783	118.34	459 480	72.44	290	20.73	35
37	163	197.79	502	182.65	466	155.07	853	116.92	501	70.80	296	19.86	37
38	220	197.64	555	182.29	511	154.51	887	116.21	521	69.98	302	18.99	38
39	278	197.50	608	181.93	556	153.96	921	115.50	541	69.16	307	18.12	39
40	2.335	197.35	5.661	181.56	8.600	153.39	10.954	114.78	12.561	68.34	13.313	17.25	40
41	392	197.19	713	181.19	645	152.83	10.987	114.06	581	67.52	317	16.37	41
42	450	197.03	766	180,81	689	152.26	11.021	113.34	601	66.69	322	15.50	42
43	507	196.87	819	180.43	734	151.69	053	112.62	620	65.87	326	14.63	43
44	564	196.71	871	180.05	778	151.12	086	111.89	639	65.04	331	13.76	44
45	621	196.54	923	179.66	821	150.54	118	111.17	658	64.21	334	12.89	45
46 47	679 736	196.36	5.975 6.028	179.27	865	149.96	151	110.44	676	63.39	338	12.01	46
48	793	196.00	0.028	178.48	/ /	149.30	214	109.71	713	61.72	341	10.27	48
49	850	195.82	131	178.08	952 8.995	148.21	246	108.24	731	60.89	347	9-39	49
50	2.907	195.63	6.183	177.68	9.038	147.62	11.277	107.50	12.748	60.06	13.350	8.52	50
51	2.964	195.44	235	177.27	081	147.03	309	106.76	765	59.22	352	7.65	51
52	3.020	195.24	286	176.86	124	146.43	340	106.02	783	58.39	354	6.77	52
53	○77	195.04	338	176.45	166	145.83	370	105.28	799	57-55	356	5.90	53
54	134	194.84	389	176.04	209	145.23	401	104.53	816	56.71	358	5.02	54
55	190	194.63	440	175.62	251	144.63	431	103.79	832	55.87	359	4.15	55
56	247	194.42	491	175.19	293	144.02	461	103.04		55.03	360	3.27	56
57	304	194.21	542	174.77	335	143.41	491	102.29	864	54.19	361	2.40	57
58	360	193.99	593	174.34	376	142.80	521	101.53	880	53.35	362	1.53	58
59	416	193.77	643	173.90	418	142.19	550	100.78	896	52.50	362	0.65	59
60	3.473	193.54	6.694	173.47	9.459	141.57	11.579	100.02	12.911	51.66	13.362	-	60

# Äquinoktium 1940.0 auf das Normaläquinoktium 1950.0 275\*

	<del> · · ·</del>												
$\alpha$	6h,	18h	7h,	19h	8h,	20h	9h,	21h	IOh,	22h	111	, 23h	α
m	+A-	_D+	+A-	-D+	+ A -	-D+	+ A -	-D+	+ A	-D+	+ A -	-D+	_
	8		8	**	В		8		8	**	В	ii.	m
0	13.362	0.22	12.903	52.09	11.564	100.41	9.438	141.88	6.668	173.69	3.444	193.66	0
I	362	1,10	888	52.94	535	101.17	396	142.50	618	174.12	388	193.88	1
2	361	1.97	872	53.78	506	101.92	355	143.11	567	174.56	331	194.10	2
3	361	2.85	856	54.62	476	102.67	313	143.73	516	174.98	275	194.32	3
4	360	3.72	840	55.46	446	103.42	271	144.33	465	175.41	218	194.53	4
5	359	4.60	824 808	56.30	416 385	104.17	229	144.94	414	175.83	162	194.74	5
	357	5.47		57.14	355	104.92	187	145.54	363	176.25	3.048	194.94	6
7 8	355	6.35 7.22	791	58.81	355	106.40	145	146.14	311 260	177.07	2.991	195.15	7 8
9	353 351	8.09	774 757	59.65	293	107.14	059	147.33	208	177.48	934	195.54	9
10	13.349	8.97	12.739	60.48	11,261	107.88	9.016		6.157	177.89	2.878	195.73	10
11	346	9.84	721	61.32	230	108.62	8.973	147.92	105	178.29	821	195./3	11
12	343	10.71	703	62.15	198	109.35	930	149.10	053	178.69	764	196.10	12
13	340	11.59	685	62.98	166	110.08	886	149.68	6.001	179.08	706	196.28	13
14	336	12.46	667	63.81	134	110.81	843	150.26	5.949	179.47	649	196.45	14
15	332	13.33	648	64.64	102	111.54	799	150.84	897	179.86	592	196.02	15
16	328	14.21	629	65.47	069	112.26	755	151.41	844	180.24	535	196.79	16
17	324	15.08	610	66.29	037	112.99	711	151.98	792	180.62	478	196,95	17
18	320	15.95	591	67.12	11.004	113.71	667	152.55	739	181,00	420	197.11	18
19	315	16.82	571	67.94	10.970	114.43	622	153.12	686	181.38	363	197.27	19
20	13.310	17.69	12.551	68.76	10.937	115.15	8.578	153.68	5.634	181.75	2.306	197.42	20
21	305	18.56	531	69.58	903	115.86	533	154.24	581	182,11	248	197.57	21
22	299	19.43	511	70.40	870	116.57	488	154.80	528	182.48	191	197.72	22
23	293	20.30	490	71.22	836	117.28	443	155.36	475	182.84	133	197.86	23
24	287	21.17	469	72.04	801	117.99	397	155.90	421	183.19	∘76	198.00	24
25	281	22.04	448	72.85	767	118.70	352	156.45	368	183.55	2.018	198.13	25
26	274	22.91	427	73.67	732	119.40	306	157.00	315	183.90	1.960	198.26	26
27	268	23.78	405	74.48	698	120.10	261	157.54	261	184.24	903	198.39	27
28	261	24.65	383	75.29	662	120.80	215	158.08	207	184.58	845	198.51	28
29	253	25.52	361	76.10	627	121.50	169	158.62	153	184.92	787	198.63	29
30	13.246	26.38	12.339	76.91	10.592	122.19	8.122	159.15	5.100	185.26	1.729	198.75	30
31	238	27.25	317	77.72	556	122.88	.076	159.68	5.046	185.59	671	198.86	31
32	230	28.12	294	78.52	520	123.57	8,030	160.21	4.992	185.92	614	198.96	32
33	222	28.98	271	79.32	484	124.26	7.983	160.73	938	186.24	556	199.07	33
34	213	29.85	248	80.13	448	124.95	936	161.25	884	186.57	498	199.17	34
35 36	195	30.71	224 20I	80.93	411	125.63	889	161.77	829	187.20	44° 382	199.26	35
37	186	31.58		81.73	375 338	126.31	842	162.80	775 720	187.51	302	199.44	36
38	176	33.30	177	83.32	301	120.99	795 747	163.30	666	187.82	266	199.53	38
39	167	34.16	128	84.12	264	128.34	700	163.81	611	188.12	208	199.61	39
40	13.156	35.03	12.104	84.91	10,226	120.34	7.652	164.31	4.556	188.42	1.150	199.69	40
41	146	35.89	079	85.70	189	129.67	604	164.81	501	188.72	092	199.76	41
42	136	36.75	054	86.49	151	130.34	556	165.31	446	189.01	1.034	199.83	42
43	125	37.61	020	87.28	113	131.00	508	165.80	391	189.30	0.975	199.90	43
44	114	38.46	12.003	88.06	°75	131.66	460	166.29	336	189.58	917	199.96	44
45	102	39.32	11.977	88.85	10.036	132.32	411	166.78	281	189.87	859	200.02	45
46	091	40.18	951	89.63	9.998	132.98	363	167.26	226	190.14	801	200.07	46
47	○79	41.04	925	90.41	959	133.63	314	167.74	170	190.42	743	200.12	47
48	067	41.89	899	91.19	920	134.28	265	168.22	115	190.69	684	200.17	48
49	055	42.75	872	91.97	881	134.93	216	168.69	059	190.96	626	200,21	49
50	13.042	43.60	11.845	92.75	9.841	135.57	7.167	169.16	4,004	191.22	0.568	200.25	50
51	029	44.45	818	93.52	802	136.22	118	169.63	3.948	191.48	510	200.28	51
52	016	45.31	791	94.29	762	136.86	068	170.09	892	191.74	451	200.32	52
53	13.003	46.16	763	95.07	722	137.49	7.019	170.55	837	191.99	393	200.34	53
54	12.989	47.01	736	95.83	682	138.13	6.969	171.01	781	192.24	335	200.37	54
55	976	47.86	708	96.60	642	138.76	919	171.47	725	192.49	277	200.39	55
56	962	48.71	679	97.37	602	139.39	869	171.92	669	192.73	218	200.40	56
57	947	49.55	651	98.13	561	140.02	819	172.37	613	192.97	160	200.41	57
58	933	50.40	622	98.89	520	140.64	769	172.81	556	193.20	102	200.42	58
59	918	51.25	594	99.65	479	141.27	719	173.25	500	193.43	0.043	200.43	59
60	12.903	52.09	11.564	100,41	9.438	141.88	6.668	173.69	3.444	193.66	_	200.43	60

Übertragung von Sternörtern vom mittleren Äquinoktium 1940.0 auf das Normaläquinoktium 1950.0

732 12 731 731 731 731 730 730 730 730 729 729 729 729 729 729 729 729 729 729	10 20 30 40 50	6 o 10 20 30 40 50 7 o 10 20 30 40 50 8 o 10 20	***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **	18 o 10 20 30 40 50 19 o 10 20 30 40 50 20 10 20 20 20	50 60 70 80 90 100 110 120	# 0.000 000 000 000 000 000 001 001 001 00	e 0.0000 0055 0109 0164 0218 e 0.0273 0327 0382 0436 0491 e 0.0545 0600 0654	350 360 370 380 390 400 410 420 430 440 450 460 470	e 0.076 082 089 097 104 e 0.113 121 131 140 150 e 0.161 172 183	e 0.1909 1963 2018 2072 2127 e 0.2181 2236 2290 2345 2399 e 0.2454 2508 2563
731 731 731 731 730 730 730 730 730 729 729 729 729 729 729 729 729	10 20 30 40 50 0 10 20 30 40 50 0 10 20 30 40 50	10 20 30 40 50 7 0 10 20 30 40 50 8 0 10 20	732 733 733 733 733 +30.733 734 734 734 734 734 +30.735 735	10 20 30 40 50 19 0 10 20 30 40 50 20 0	0 10 20 30 40 50 60 70 80 90 100 110	6 0.002 002 003	0055 0109 0164 0218 e 0.0273 0327 0382 0436 0491 e 0.0545 0600 0654	360 370 380 390 400 410 420 430 440 450 460 470	082 089 097 104 e 0.113 121 131 140 150 e 0.161 172 183	1963 2018 2072 2127 6 0.2181 2236 2290 2345 2399 6 0.2454 2508 2563
731 731 731 730 730 730 730 730 729 729 729 729 729 729 729 729 729	20 30 40 50 0 10 20 30 40 50 0 10 20 30	20 30 40 50 7 0 10 20 30 40 50 8 0 10 20	732 733 733 733 734 734 734 734 734 734 +30.735 735	20 30 40 50 19 0 10 20 30 40 50 20 0	20 30 40 50 60 70 80 90 100 110	6 0.002 002 003	0109 0164 0218 e 0.0273 0327 0382 0436 0491 e 0.0545 0600 0654	370 380 390 400 410 420 430 440 450 460 470	089 097 104 e 0.113 121 131 140 150 e 0.161 172 183	2018 2072 2127 6 0.2181 2236 2290 2345 2399 6 0.2454 2508 2563
731 731 730 730 730 730 730 729 729 729 729 729 729 729 729 729	30 40 50 0 10 20 30 40 50 0 10 20 30	30 40 50 7 0 10 20 30 40 50 8 0 10 20	733 733 733 734 734 734 734 734 734 +30.735 735	30 40 50 19 0 10 20 30 40 50 20 0	30 40 50 60 70 80 90 100 110	6 0.000 001 001 001 001 6 0.002 002	0164 0218 e 0.0273 0327 0382 0436 0491 e 0.0545 0600 0654	380 390 400 410 420 430 440 450 460 470	097 104 e 0.113 121 131 140 150 e 0.161 172 183	2072 2127 6 0.2181 2236 2290 2345 2399 6 0.2454 2508 2563
731 730 730 730 730 730 729 729 729 729 729 729 729 729	40 50 10 20 30 40 50 0 10 20 30	40 50 7 0 10 20 30 40 50 8 0 10 20	733 733 +30.733 734 734 734 734 734 +30.735 735	40 50 19 0 10 20 30 40 50 20 0	40 50 60 70 80 90 100 110	6 0.000 000 001 001 001 6 0.002 002	0218 e 0.0273 0327 0382 0436 0491 e 0.0545 0600 0654	390 400 410 420 430 440 450 460 470	104 e 0.113 121 131 140 150 e 0.161 172 183	2127 6 0.2181 2236 2290 2345 2399 6 0.2454 2508 2563
730 13 730 13 730 730 729 729 729 14 729 729 729 729 729 729	50 0 10 20 30 40 50 0 10 20 30	50 7 0 10 20 30 40 50 8 0 10 20	733 +30.733 734 734 734 734 734 +30.735 735	50 19 0 10 20 30 40 50 20 0	50 60 70 80 90 100 110	e 0.000 000 001 001 001 e 0.002 002	e 0.0273 0327 0382 0436 0491 e 0.0545 0600 0654	400 410 420 430 440 450 460 470	e 0.113 121 131 140 150 e 0.161 172 183	e 0.2181 2236 2290 2345 2399 e 0.2454 2508 2563
730 13 730 730 729 729 729 729 729 729 729 729 729	0 10 20 30 40 50 0 10 20 30	7 0 10 20 30 40 50 8 0 10 20	+30.733 734 734 734 734 734 +30.735 735	19 0 10 20 30 40 50 20 0	60 70 80 90 100 110 120	000 001 001 001 002 002	0327 0382 0436 0491 e 0.0545 0600 0654	410 420 430 440 450 460 470	121 131 140 150 6 0.161 172 183	2236 2290 2345 2399 e 0.2454 2508 2563
730 730 729 729 729 729 729 729 729 729	10 20 30 40 50 0 10 20 30	10 20 30 40 50 8 0 10 20	734 734 734 734 734 +30.735 735	10 20 30 40 50 20 0	60 70 80 90 100 110 120	001 001 001 e 0.002 002 003	0327 0382 0436 0491 e 0.0545 0600 0654	420 430 440 450 460 470	121 131 140 150 6 0.161 172 183	2236 2290 2345 2399 e 0.2454 2508 2563
730 729 729 729 729 729 729 729 729	20 30 40 50 0 10 20 30	20 30 40 50 8 0 10 20	734 734 734 734 +30.735 735	20 30 40 50 20 0	80 90 100 110 120	001 001 e 0.002 002 003	0382 0436 0491 e 0.0545 0600 0654	430 440 450 460 470	140 150 e 0.161 172 183	2290 2345 2399 e 0.2454 2508 2563
729 729 729 729 729 729 729 729	30 40 50 0 10 20 30	30 40 50 8 0 10 20	734 734 734 +30.735 735	30 40 50 20 0 10	80 90 100 110 120	e 0.002 002 003	0436 0491 e 0.0545 0600 0654	440 450 460 470	140 150 e 0.161 172 183	2345 2399 e 0.2454 2508 2563
729 729 729 14 729 729 729 729	40 50 0 10 20 30	40 50 8 0 10 20	734 734 +30.735 735	40 50 20 0 10	100 110 120	e 0.002 002 003	0491 e 0.0545 0600 0654	450 460 470	150 e 0.161 172 183	2399 e 0.2454 2508 2563
729   729   14 729   729   729	50 0 10 20 30	50 8 0 10 20	734 +30.735 735	50 20 0 10	110 120	002	o600 o654	460 470	172 183	e 0.2454 2508 2563
729   14 729 729 729 729	0 10 20 30	8 o 10 20	+30.735 735	20 0	110 120	002	o600 o654	460 470	172 183	2508 2563
729 729 729 729	10 20 30	10 20	735	10	120	003	0654	470	183	2563
729 729 729 729	10 20 30	10 20	735	10						
729 729 729	20 30	20			130					Ohrm
729 729	30		133		Y 40	004	0709	480	195	2617
729		30	735	30	140	005		490	207	2672
		40	735	40	150	e 0.006	e 0.0818	500	e 0.220	e 0.2726
729	50	50	735	50	160	007	0873	510	234	2781
					170	009	0927	520	248	2835
729   15		9 0	+30.735	21 0	180	010	0982	530	262	2890
729	10	10	735	10	190	012	1036	540	277	2944
			1		200	e 0.014	6 O.TOOT	550	60.202	e 0.2999
		_								3053
								_	1	3107
		50		50		_				3162
729   16	0	10 0	+30.735	22 0	~					3216
729	10	10	_	10						
729	20	20			-					e 0.3271
729	30	30					_			3325
730	40	40								3380
730	50	50	734	50				-		3434
730 17	0	11 0	+30.733	23 0	290	043	1582	640	402	3489
730	10	10		10	300	e 0.048	e 0.1636	650	e 0.484	e 0.3543
731	20	20		20	310	053	1691	660	506	3598
731	30	30		30	320	058	1745	670	529	3652
731	40	40	732	40	330	063	1800	680	553	3707
731	50	50	732	50	340	069	1854	690	578	3761
732 18	0	12 0	+30.732	24 0	350	e 0.076	e 0.1909	700	e 0.604	1
. 7777 77777 77777	29 29 29 29 29 29 29 29 29 30 30 30 31 31 31	29 20 29 30 29 40 29 50 29 16 0 29 20 29 20 29 30 30 40 30 50 30 17 0 30 30 10 31 30 31 30 31 50	29	29	29	29	29	29	29	29

e bedeutet: Vorzeichen entgegengesetzt dem Vorzeichen des Arguments.

$$\alpha_{1950} = \alpha_{1940} + B + C + \Delta C$$
, wobei  $C = A$ . tg  $(\delta_{1940} + D)$   
 $\delta_{1950} = \delta_{1940} + D + R$ , wobei  $R = A$ .  $P$ 

A und D sind aus der Tafel S. 274\* u. 275\* mit dem Argument  $\alpha_{1940}$  zu entnehmen. Für die Werte von  $\alpha$  zwischen o<sup>h</sup> und 12<sup>h</sup> gelten die Vorzeichen zur Linken, für die Werte von  $\alpha$  zwischen 12<sup>h</sup> und 24<sup>h</sup> die Vorzeichen zur Rechten. B,  $\Delta C$  und P sind in der obenstehenden Tafel enthalten. Die Vorzeichen von  $\Delta C$  und P sind dem Vorzeichen von C entgegengesetzt.

# Finsternisse, Merkurdurchgang, Sternbedeckungen, Mösting A, Trabanten

Konstellationen, Hilfstafeln

1940

#### Sonnenfinsternisse 1940

Im Jahre 1940 finden zwei Sonnenfinsternisse statt.

#### I. Ringförmige Sonnenfinsternis 1940 April 7 unsichtbar in Berlin.

Konjunktion in Rektaszension April 7, 20 28	38.8 V	Velt-Zeit
Rektaszension des Mondes	53.77 55.30 53.77 9.16	
TO 111 11 1 0	1.0 49.0 39.7 56.3	H
Äquatorialhorizontalparallaxe des Mondes . 54 ,, der Sonne	15.5 8.8	
	46.4 58.2	
	tl. Länge eenwich	
	7 46 5 23	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Zentrale Verfinsterung im wahren Mittag ,, 20 28.6 12	6 39	+20 20
10 1. 1. 10'	7 19	+29 13 +24 37

#### Verlauf der Zentrallinie

Welt- Zeit	Westl. Länge v. Greenwich	Geogr. Breite	Dauer d. ringförm. Verfinst.	Welt- Zeit	Westl. Länge v. Greenwich	Geogr. Breite	Dauer d. ringförm. Verfinst.
h m 18 25.6 18 30 18 40 18 50 19 0 19 20 19 40 20 0	185 23 171 12.2 161 15.4 155 14.4 150 43.0 143 49.2 138 20.3 133 27.8	- 4 2 - 1 33.2 + 1 16.8 + 3 34.4 + 5 38.3 + 9 23.5 + 12 49.7 + 16 2.6	5 34.7 5 58.3 6 15.9 6 30.7 6 54.9 7 12.8 7 24.9	h m 20 20 20 40 21 0 21 20 21 40 22 0 22 10 22 15	128 44.1 123 47.4 118 15.1 111 37.1 103 0.2 90 5.6 79 3.9 68 7.7	+19 4.8 +21 56.8 +24 37.8 +27 5.2 +29 12.6 +30 41.2 +30 47.3 +30 7.9	7 30.4 7 28.8 7 19.7 7 2.7 6 37.6 6 3.0 5 38.8 5 19.5
20 20	128 44.1	+19 4.8	7 30.4	22 16.1	59 33	+29 13	-

Die Finsternis ist sichtbar im Stillen Ozean, in Nordamerika mit Ausnahme des nordwestlichsten Teiles, in Mittelamerika, im Norden Südamerikas und im westlichen Teil des Atlantischen Ozeans.

# Sonnenfinsternisse 1940

Elemente der ringförmigen Sonnenfinsternis 1940 April 7

Welt-Zeit	x	y	log sin d	log cos d	ĺτ	$l^{(a)}$	$l^{(i)}$
17 10	-1.610471	-0.254135	9.083412	9.996788	76 58 5.7	+0.568246	+0.022217
20	1.529426	0.229828	9.083570	9.996786	79 28 8.2	0.568248	0.022218
30	1.448377	0.205523	9.083728	9.996783	81 58 10.7	0.568248	0.022219
40	1.367324	0.181219	9.083886	9.996781	84 28 13.2	0.568248	0.022219
50	1.286268	0.156918	9.084044	9.996779	86 58 15.7	0.568247	0.022219
18 0	-1.205208	-0.132618	9.084202	9.996776	89 28 18.1	+0.568246	+0.022218
10	1.124145	0.108320	9.084359	9.996774	91 58 20.6	0.568244	0.022216
20	1.043079	0.084024	9.084517	9.996772	94 28 23.1	0.568242	0.022214
30	0.962010	0.059731	9.084675	9.996769	96 58 25.5	0.568239	0.022211
40	0.880938	0.035440	9.084832	9.996767	99 28 28.0	0.568236	0.022208
50	0.799864	0.011150	9.084990	9.996765	101 58 30.5	0.568232	0.022204
19 0	-0.718788	+0.013137	9.085147	9.996762	104 28 33.0	+0.568228	+0.022200
10	0.637710	0.037422	9.085304	9.996760	106 58 35.5	0.568223	0.022195
20	0.556630	0.061704	9.085462	9.996758	109 28 38.0	0.568217	0.022190
30	0.475549	0.085983	9.085619	9.996755	111 58 40.4	0.568211	0.022184
40	0.394466	0.110260	9.085776	9.996753	114 28 42.9	0.568205	0.022177
50	0.313381	0.134534	9.085934	9.996751	116 58 45.4	0.568198	0.022170
20 0	-0.232295	+0.158805	9.086091	9.996748	119 28 47.8	+0.568190	+0.022163
10	0.151207	0.183074	9.086248	9.996746	121 58 50.3	0.568182	0.022155
20	-0.070119	0.207340	9.086405	9.996744	124 28 52.8	0.568173	0.022146
30	+0.010971	0.231604	9.086562	9.996741	126 58 55.2	0.568164	0.022137
40	0.092062	0.255866	9.086719	9.996739	129 28 57.7	0.568154	0.022127
50	0.173154	0.280126	9.086875	9.996737	131 59 0.2	0.568144	0.022117
21 0	+0.254247	+0.304383	9.087032	9.996734	134 29 2.6	+0.568133	+0.022106
10	0.335341	0.328638	9.087189	9.996732	136 59 5.1	0.568122	0.022094
20	0.416436	0.352891	9.087346	9.996729	139 29 7.6	0.568110	0.022082
30	0.497531	0.377141	9.087502	9.996726	141 59 10.0	0.568097	0.022070
40	0.578627	0.401389	9.087658	9.996724	144 29 12.5	0.568084	0.022057
50	0.659723	0.425634	9.087814	9.996722	146 59 15.0	0.568070	0.022043
22 0	+0.740818	+0.449875	9.087971	9.996719	149 29 17.4	+0.568056	+0.022029
10	0.821914	0.474113	9.088127	9.996717	151 59 19.9	0.568041	0.022015
20	0.903010	0.498348	9.088284	9.996715	154 29 22.4	0.568026	0.022000
30	0.984106	0.522580	9.088440	9.996712	156 59 24.8	0.568010	0.021984
40	1.065202	0.546808	9.088596	9.996710	159 29 27.3	0.567994	0.021968
50	1.146297	0.571033	9.088752	9.996708	161 59 29.8	0.567977	0.021951
23 0	+1.227390	+0.595256	9.088908	9.996705	164 29 32.2	+0.567960	+0.021933
10	1.308482	0.619476	9.089064	9.996703	166 59 34.7	0.567942	0.021914
20	1.389573	0.643693	9.089220	9.996701	169 29 37.2	0.567923	0.021894
30	+1.470662	+0.667906	9.089376	9.996698	171 59 39.6	+0.567904	+0.021875

Welt-Zeit	x' y'		log tang f(a)	log tang f(i)
h m	1 0 1	1.0.0004400	- 66000	7.66716
17 0	+0.0081034	+0.0024309	7.66933	
18 o	0.0081061	0.0024299	7.66932	7.66715
19 0	0.0081077	0.0024286	7.66931	7.66715
20 0	0.0081087	0.0024270	7.66931	7.66714
21 0	0.0081094	0.0024256	7.66931	7.66714
22 0	0.0081096	0.0024239	7.66930	7.66713
23 0	0.0081092	0.0024222	7.66929	7.66713
24 0	+0.0081082	+0.0024204	7.66929	7.66712

# II. Totale Sonnenfinsternis 1940 Oktober 1 unsichtbar in Berlin.

Konjunktion in Rektaszension Oktober	er 1, 12 52 2.0 Welt-Zeit
Rektaszension des Mondes Stündliche Änderung	12 30 4.37 2 25.65
Rektaszension der Sonne Stündliche Änderung	12 30 4.37 9.06
Deklination des Mondes	9.00 - 3 31 23.3
Stündliche Änderung	- 11 45.8 - 3 14 51.2
Stündliche Änderung	<b>–</b> 58.2
Äquatorialhorizontalparallaxe des Mondes ,, der Sonne	° ' " 1 1 24.2 8.8
Halbmesser des Mondes	16 43.1
" der Sonne	15 58.8

	Welt-Zeit	Westl.Länge v.Greenwich	Geogr. Breite
Anfang der Finsternis Oktober	I, 10 8.2	64 10	+ 7 58
Beginn der zentralen Verfinsterung ,,	11 4.3	78 30	+ 2 41
Zentrale Verfinsterung			
im wahren Mittag ,,	12 52.0	15 36	-19 2
Ende der zentralen Verfinsterung ",	14 22.9	306 13	-32 36
Ende der Finsternis "	15 19.0	320 39	-27 20

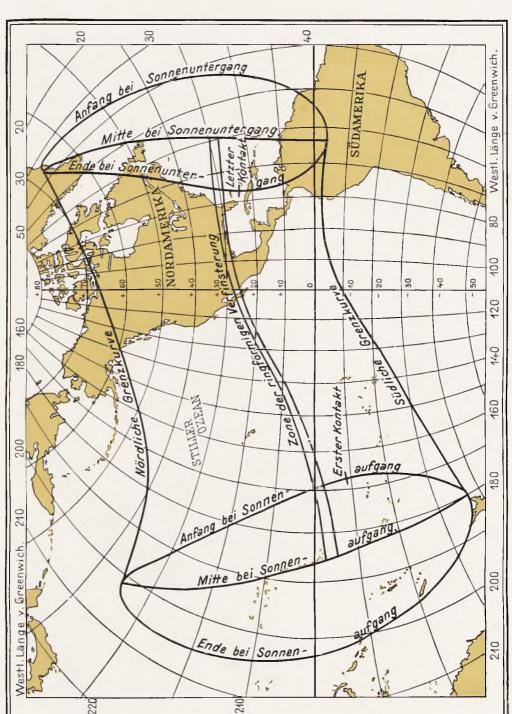
#### Verlauf der Zentrallinie

Welt- Zeit	Westl. Länge v. Greenwich	Geogr. Breite	Dauer d. Totalität	Welt- Zeit	Westl. Länge v. Greenwich	Geogr. Breite	Dauer d. Totalität
h m H 4.3 H 5 H 10 H 20 H 20 H 20 H 20 H 20	78 30 72 8.5 61 11.6 51 12.0 39 45.0 31 52.6	+ 2 4I + 2 1I.5 + 0 40.2 - I 40.I - 5 46.8 - 9 36.8	2 42.2 3 12.1 3 46.4 4 33.4 5 5.9	h m 12 40 13 0 13 20 13 40 14 0 14 10	19 16.7 13 3.9 6 7.0 357 35.1 345 39.6 336 48.2 321 26.1	-16 54.0 -20 25.8 -23 53.5 -27 15.7 -30 27.1 -31 53.0	5 35.1 5 31.8 5 16.4 4 48.6 4 7.1 3 39.2
12 40	25 21.1 19 16.7	-13 18.2 $-16 54.0$	5 26.4 5 35.1	14 20 14 22.9	306 13	$\begin{vmatrix} -32 & 55.9 \\ -32 & 36 \end{vmatrix}$	2 58.9

Die Finsternis ist sichtbar in Mittelamerika mit Ausnahme des nördlichen Teiles, auf Florida und auf den Antillen, in Südamerika mit Ausnahme der Südspitze, im Atlantischen Ozean mit Ausnahme des nördlichen Teiles, in Afrika südlich vom Äquator, auf Madagaskar und im südwestlichen Teil des Indischen Ozeans.

# Ringförmige Sonnenfinsternis

1940 April 7



Zu Seite 278\*



# Totale Sonnenfinsternis

280 Westl. Länge v. Greenwich. 290 Prepretunannos 199 300 Kontakt 320 280 50 Verfinster H Grentwicke 340 A 0 50 m 1940 Oktober 1 - 40 20 30 3 20 90 70 0 20 4.0 90 40 ATLANTISCHER OZEAN AMERIKA 100 09 SUD-110 80 bue fur Westl. Länge v. Greenwich. 129 9HIW Soe Ineuauuos 120 apu3 109



# Sonnenfinsternisse 1940

Elemente der totalen Sonnenfinsternis 1940 Oktober 1

Welt-Zeit	x	y	$\log \sin d$	$\log \cos d$	μ	$l^{(\alpha)}$	$l^{(i)}$
h m	-1.595052	+0.235466	8.747040n	9.999322	332 34 14.4	+0.533732	-0.012124
10 0	1.502359	0.206078	8.747395n	9.999322	335 4 17.2	0.533742	0.012124
20	1.409662	0.176691	8.747750n	9.999321	337 34 20.0	0.533752	0.012113
30	1.316961	0.147304	8.748105n	9.999320	340 4 22.8	0.533752	0.012103
40	1.224256	0.117919	8.748460n	9.999319	342 34 25.6	0.533770	0.012094
	1.131548	0.088535	8.748814n	9.999317	342 34 25.0	0.533778	0.012000
50	1.131540	0.000333	0.74001411	9.999310	343 4 20.4	0.533770	0.012079
II O	-1.038836	+0.059152	$8.749168_n$	9.999315	347 34 31.3	+0.533785	-0.012072
10	0.946121	0.029771	8.749522n	9.999314	350 4 34.1	0.533791	0.012066
20	0.853403	+0.000391	8.749875n	9.999313	352 34 36.9	0.533797	0.012060
30	0.760683	-0.028988	8.750228n	9.999312	355 4 39.7	0.533802	0.012055
40	0.667961	0.058365	8.750581n	9.999310	357 34 42.5	0.533806	0.012051
50	0.575236	0.087741	8.750934n	9.999309	0 4 45.3	0.533809	0.012048
12 0	-0.482509	-0.117115	8.751286n	9.999308	2 34 48.2	+0.533812	-0.012045
10	0.389781	0.146488	8.751638n	9.999307	5 4 51.0	0.533814	0.012043
20	0.297051	0.175859	8.751990n	9.999306	7 34 53.8	0.533814	0.012042
30	0.204319	0.205228	8.752341n	9.999305	10 4 56.6	0.533815	0.012042
40	0.111586	0.234595	8.752692n	9.999303	12 34 59.4	0.533815	0.012042
50	0.018853	0.263961	8.753043n	9.999302	15 5 2.2	0.533814	0.012043
13 0	+0.073882	-0.293325	8.753394n	9.999301	17 35 5.0	+0.533812	-0.012044
10	0.166617	0.322687	8.753744n	9.999300	20 5 7.8	0.533810	0.012046
20	0.259352	0.352048	8.754094n	9.999299	22 35 10.6	0.533807	0.012050
30	0.352087	0.381406	8.754444n	9.999298	25 5 13.4	0.533803	0.012054
40	0.444822	0.410762	8.754793n	9.999297	27 35 16.2	0.533798	0.012058
50	0.537556	0.440116	8.755142n	9.999296	30 5 19.0	0.533793	0.012063
14 0	+0.630290	-0.469467	8.755491n	9.999295	32 35 21.9	+0.533787	-0.012069
10	0.723023	0.498816	8.755839n	9.999294	35 5 24.7	0.533780	0.012076
20	0.815754	0.528162	8.756187n	9.999293	37 35 27.5	0.533773	0.012084
30	0.908483	0.557505	8.756535n	9.999292	40 5 30.3	0.533765	0.012092
40	1.001210	0.586846	8.756883n	9.999290	42 35 33.I	0.533756	0.012100
50	1.093935	0.616183	8.757231n	9.999289	45 5 35.9	0.533746	0.012110
15 0	+1.186657	-0.645517	8.757578n	9.999288	47 35 38.7	+0.533736	-0.012120
10	1.279376	0.674848	8.757925n	9.999287	50 5 41.5	0.533725	0.012131
20	+1.372091	-0.704176	8.758272n	9.999286	52 35 44.3	+0.533713	-0.012143

Welt-	Zeit	x'	y'	$\log \tan g f^{(a)}$	$\log \tan f^{(i)}$
h	m				
10	0	+0.0092692	-0.0029388	7.66942	7.66725
11	0	0.0092713	0.0029382	7.66943	7.66726
12	0	0.0092728	0.0029373	7.66943	7.66726
13	0	0.0092735	0.0029363	7.66944	7.66727
14	0	0.0092734	0.0029350	7.66944	7.66727
15	0	0.0092721	0.0029333	7.66945	7.66728
16	0	+0.0092692	-0.0029311	7.66945	7.66728

#### Merkurdurchgang

# Merkurdurchgang 1940 November 11-12 unsichtbar in Berlin.

Konjunktion in Rektaszension	No	v. 11, 23 49 21.6 Welt-Zeit
Rektaszension des Merkur . Stündliche Änderung Rektaszension der Sonne . Stündliche Änderung		15 8 0.59 — 12.53 15 8 0.59 — 10.16
Deklination des Merkur Stündliche Änderung Deklination der Sonne Stündliche Änderung		-17 29 7.7 + 1 44.1 -17 35 51.1 - 41.0
$\ddot{\mathbf{A}} \mathbf{quatorial horizontal parallaxe}$		13.01 8.89
Halbmesser des Merkur der Sonne		4.94 16′ 9.72

#### Geozentrischer Verlauf des Durchganges

	Welt-Zeit	Positionswinkel
	h m s	0 ,
Eintritt, äußere Berührung	.Nov. 11, 20 49 16.6	
,, innere ,,	. ,, 11, 20 51 5.0	91 39
Kleinster Abstand der Zentren 6' 8"3	. ,, II, 23 21 34.3	
Austritt, innere Berührung	. ,, 12, 1 52 7.5	316 32
"äußere "	. ,, 12, 1 53 55.9	316 17

Merkur steht zu diesen Zeiten im Zenit der Orte, deren geographische Lage ist:

136°	0	westl.	Länge	von	Greenwich,	17	34	südliche	Breite
136	27	,,	,,	,,	,,	17	34	,,	,,
174	19	,,	,,	,,	,,	17	30	,,	22
212	II	,,	,,	,,	,,	17	<b>2</b> 6	,,	**
212	38	,,	,,	,,	,,	17	26	,,	,,

Der Eintritt ist sichtbar in Nordamerika mit Ausnahme des nordöstlichen Teiles, in Südamerika mit Ausnahme des östlichsten Teiles, im Stüllen Ozean, im südlichen Eismeer, in Polynesien, auf Neu-Guinea und Neuseeland, im Osten Australiens und im äußersten Nordosten Asiens. Der Austritt ist sichtbar im äußersten Nordwesten Nordamerikas, im Stillen Ozean mit Ausnahme des östlichen Teiles, im südlichen Eismeer, in Polynesien, in Australien, im Indischen Ozean mit Ausnahme des westlichen Teiles, in Indien, auf den Sunda-Inseln und im Osten Asiens.

Für einen Ort mit der geozentrischen Breite  $\varphi'$  der Entfernung  $\varrho$  vom Erdmittelpunkt und der westlichen Länge  $\lambda$  von Greenwich ergibt sich die Welt-Zeit der einzelnen Phasen aus folgenden Formeln:

```
Eintr., äuß. Ber., 20^{\rm h} 49^{\rm m} 16^{\rm h}6 + 1^{\rm h}25 \varrho \sin\varphi' —45^{\rm h}13 \varrho \cos\varphi' \cos ( 44^{\circ} 53'3—\lambda) , inn. , 20 51 5.0 + 1.07 \varrho \sin\varphi' —45.22 \varrho \cos\varphi' \cos ( 45 25.2—\lambda) Austr., inn. , 1 52 7.5 +31.34 \varrho \sin\varphi' +32.37 \varrho \cos\varphi' \cos (285 22.4—\lambda) , äuß. , 1 53 55.9 +31.16 \varrho \sin\varphi' +32.43 \varrho \cos\varphi' \cos (285 58.4—\lambda)
```

# Ein- und Austritte für Berlin

Tag		Stern	Größe	Phase	Welt-Zeit	P	а	b	Alter des Mondes
194	0								
Jan.	12	BD9° 5854	6.8	E.	16 45 5	31°	-0.4	+0.5	3.I
	16	$BD + 5^{\circ}$ 131	6.3	E.	21 28.8	124	-0.3	-3.3	7.3
	20	δ Tauri	3.9	E.	21 53.6	102	-1.1	-1.5	11.3
	20	64 Tauri	4.8	E.	22 39.5	131	-0.7	-2.9	11.3
	22	$BD + 18^{\circ}$ 1112	6.4	E.	17 18.4	99	-0.7	+1.1	13.2
	23	λ Geminorum	3.6	E.	20 36.5	119	-1.3	-0.3	14.3
	28	$BD$ $+$ 0 $^{\circ}$ 2782	6.3	A.	2 32.8	283	-1.4	-0.5	18.5
Febr.	I	ν Librae	5.3	A.	3 11.7	248	-r.5	+1.7	22.6
	16	$BD + 16^{\circ} 527$	6.9	E.	17 20.1	68	-1.5	+-0.7	8.4
März	II	ζ¹ Piscium	5.6	E.	17 47.9	23	-0.5	+-0.9	2.6
	II	$BD + 6^{\circ} 175$	6.5	E.	17 48.9	23	-o.5	+1.0	2.6
	12	$BD + 10^{\circ} 275$	6.8	E.	19 5.1	30	-0.5	+0.5	3.7
	16	115 Tauri	5.3	E.	18 5.5	116	-1.4	-1.6	7.7
	16	$BD + 18^{\circ} 873$	7.0	E.	20 49.7	28	_		7-7
	17	$BD+17^{\circ}$ 1224	6.8	E.	17 54.2	129	-1.4	-1.6	8.7
	19	$BD + 14^{\circ} 1879$	7.1	E.	19 48.7	91	-1.5	-0.1	10.7
	21	ω Leonis	5.5	E.	0 29.6	148	-0.3	-2.3	11.9
	26	λ Virginis	4.6	A.	0 8.9	256	-1.6	+0.8	16.9
April	14	51 Geminorum	5.3	E.	23 2.0	113	+0.2	-r.7	7.1
	17	и Cancri	5.1	E.	0 14.0	84	0.1	-1.4	9.1
Mai	12	$BD + 15^{\circ} 1676$	7.2	E.	20 35.8	124	-o.1	-2.0	5.2
	13	A <sup>2</sup> Cancri	5.7	E.	21 4.8	85	-o.5	-1.4	6.4
	19	λ Virginis	4.6	E.	20 4.7	144	-o.8	<b>—0.5</b>	12.4
	25	ρ Sagittarii	4.0	E.	I 43.2	90	-r.6	+0.3	17.6
Juni	13	BD -2° 3478	6.9	E.	21 2.5	141	-0.7	-2.0	7.8
Juli	15	BD —18° 4302	7.1	E.	21 5.3	81	-1.5	0.3	10.4
	25	73 Piscium	6.2	A.	23 10.8	229	-0.3	+2.2	20.5
	30	63 Tauri	5.7	A.	I 9.4	273	o.I	+1.4	24.6
Aug.	12	BD -19° 4605	6.5	E.	20 42.7	100	-1.4	-1.0	9.0
~ .	27	$BD + 16^{\circ} 672$	5.7	A.	0 56.3	222	0.0	+2.6	23.2
Sept.	9	BD —19° 4800	7.3	E.	20 12.5	77	-1.1	-0.9	7.7
	II	BD -17° 5746	7.1	E.	18 39.6	137			9.6
	12	$BD - 14^{\circ} 5839$	7.0	E.	22 38.9	115	-1.6	-1.9	10.8
	13	BD -12° 6005	6.5	E.	18 52.9	88	-1.3	+1.1	11.7
	14	artheta Aquarii	4.3	E.	20 13.9	I	-	-	12.7
	14	ρ Aquarii	5-4	E.	21 58.2	99	-1.9	—o.3	12.8
	22	α Tauri	I.I	E.	21 40.2	154	-		20.8
07.	22	α Tauri	I.I	A.	21 56.6	185	_	_	20.8
Okt.	11	<i>BD</i> −9° 5908	7.2	E.	19 58.5	41	-r.r	+r.0	10.3
	11	$BD - 8^{\circ} 5817$	7.0	E.	23 23.7	39	-0.5	+0.1	10.4
	12	$BD - 5^{\circ} 5885$	5.9	E.	22 50.1	113	-1.7	-2.3	11.4
	13	BD —5° 5894	6.4	E.	0 21.3	132	_		11.5
	17	38 Arietis	5.2	Α.	23 20.3	246	-1.4	+1.2	16.4
	19	63 Tauri	5.7	Α.	22 36.7	315	-1.7	-o.6	18.4
	22	$BD + 16^{\circ} 1363$	6.0	A.	23 20.1	253	-o.3	+1.9	21.5

# Ein- und Austritte für Berlin

Tag		Stern	Größe	Phase	Welt-Zeit	P	а	b	Alter des Mondes
1940	,					19			
0.	25	α Cancri	4-3	E.	1 56.6	116°	0.7	+0.7	23.6
	25	α Cancri	4.3	A.	3 2.8	270	-1.1	+1.2	23.6
Nov.		$BD+$ 1 $^{\circ}$ 28	7.3	E.	0 55.4	90	<b>一0.4</b>	-1.7	11.1
	17	130 Tauri	5.5	A.	19 2.4	271	0.0	+1.5	17.9
	20	$BD + 13^{\circ} 1940$	6.4	A.	21 38.7	247	+0.1	+2.0	21.0
	24	79 Leonis	5.5	A.	2 19.0	290	-0.6	+0.9	24.2
Dez.	4	$BD - 12^{\circ} 6005$	6.5	E.	16 21.2	42	-1.1	+0.7	5.3
	4	$BD-12^{\circ}5998$	6.8	E.	15 52.2	52	-1.3	+0.6	5.3
	5	ρ Aquarii	5.4	E.	18 25.6	52	-1.0	0.0	6.4
	6	$BD - 5^{\circ} 5917$	6.6	E.	16 7.2	131	-	-	7.3
	8	$BD+2^{\circ}80$	6.6	E.	17 41.1	98	-r.8	+0.3	9.4
	9	$BD + 6^{\circ} 228$	6.7	E.	21 59.2	III	-1.4	-2.3	10.5
	16	26 Geminorum	5.1	A.	3 38.7	331	<b>⊸0.2</b>	-3.3	16.7
	20	43 Leonis	6.3	A.	5 33.2	330	-0.7	-2.2	20.8

#### Ein- und Austritte für Breslau

Та	3	Stern	Größe	Phase	Welt-Zeit	P	а	b	Alter des Mondes
194	.0								
Jan.	12	BD −9° 5854	6.8	E.	16 47.0	38		-+0,I	3.I
	16	$BD + 5^{\circ}$ 131	6.3	E.	21 33.9	130	-0.1	-3.6	7.3
	20	δ Tauri	3.9	E.	22 0.2	105	-1.0	-1.7	11.3
	20	64 Tauri	4.8	E.	22 45.9	134	<b>-0.6</b>	-3.0	11.3
	22	$BD + 18^{\circ}$ 1112	6.4	E.	17 20.3	106	-0.9	+0.9	13.2
	23	λ Geminorum	3.6	E.	20 42.4	123	-1.4	-o.6	14.3
	28	$BD + 0^{\circ} 2782$	6.3	A.	2 39.1	284	-r.4	—o.8	18.5
Febr.	I	ν Librae	5.3	A.	3 15.8	250	-1.6	+1.5	22.6
	16	$BD + 16^{\circ} 527$	6.9	E.	17 25.3	74	-1.6	+o.4	8.4
März	ΙI	ζ¹ Piscium	5.6	E.	17 48.9	28	-0.4	+0.6	2.6
	11	$BD + 6^{\circ} 175$	6.5	E.	17 49.6	28	-0.4	+0.7	2.6
	12	$BD + 10^{\circ} 275$	6.8	E.	19 6.1	34	-0.4	+0.3	3.7
	16	115 Tauri	5.3	E.	18 13.1	118	-1.3	-1.9	7.7
	16	$BD + 18^{\circ} 873$	7.0	E.	20 54.0	29	_		7.7
	17	$BD$ $+17^{\circ}$ 1224	6.8	E.	18 2.1	132	-1.4	-2.0	8.7
	19	$BD + 14^{\circ} 1879$	7.1	E.	19 55.0	92	-1.5	-0.3	10.7
	21	ω Leonis	5.5	E.	0 33.5	147	-0.2	-2.3	11.9
	26	λ Virginis	4.6	A.	0 14.6	257	-1.7	+0.6	16.9
Mai	12	$BD + 15^{\circ} 1676$	7.2	E.	20 38.4	124	0.0	-1.9	5.2
	13	A <sup>2</sup> Cancri	5.7	E.	21 8.3	84	<b>-0.4</b>	-1.4	6.4
	19	λ Virginis	4.6	E.	20 8.6	142	-0.9	<b>-0.6</b>	12.4

#### Ein- und Austritte für Breslau

					,					
	Tag	3	Stern	Größe	Phase	Welt-Zeit	P	а	b	Alter des Mondes
	194	0								
	Mai		ρ Sagittarii	m	E.	h m	0	m T 6	m	1 d
	Juni	25	BD -2° 3478	4.0	E.	I 49.4	93	-1.6	0.0	17.6
	Juni	13		6.9	A.	21 7.7	141	-0.6	-2.I	7.8
1688	Juli	24	ϑ Aquarii BD18° 4302	4.3	E.	22 48.4	263	-0.7	+1.7	18.9
	Jun	15		7.I		21 11.6	83	-1.4	-o.5	10.4
đa.		25	73 Piscium	6.2	A.	23 9.2	225	-o.3	+2.2	20.5
92	A 27.00	30	63 Tauri · BD —12° 4055	5.7	A. E.	I 7.9	268	-0.1	+1.5	24.6
23	Aug.	9		6.7		19 25.4	125	-0.9	-1.8	6.0
94		12	BD —19° 4605	6.5	E.	20 49.5	103	-1.4	-1.2	9.0
36	Same	27	$BD + 16^{\circ} 672$	5.7	A.	0 53.0	215	0.0	+2.9	23.2
98	Sept.		29 Ophiuchi	6.4	E.	18 21.1	84	-1.4	-0.7	6.7
99		9	BD —19° 4800	7.3	E.	20 18.0	81	-1.0	-1.0	7.7
1700		10	BD —18° 5115	6.9	E.	18 6.2	117	-1.7	-0.3	8.6
01		II	$BD - 17^{\circ} 5746$	7.1	E.	18 49.4	144	-		9.6
02		12	BD —14° 5839	7.0	E.	22 49.2	125	8.1	-2.8	10.8
0.3		13	BD —12° 6005	6.5	E.	18 57.3	91	-1.5	+1.0	11.7
04		14	artheta Aquarii	4.3	E.	20 11.8	11	<b>-0.7</b>	+2.6	12.7
0.5	01.	14	ρ Aquarii	5.4	E.	22 6.9	107	-2.1	<b>-0.9</b>	12.8
	Okt.	II	<i>BD</i> −9° 5908	7.2	E.	20 2.2	48	-1.3	+0.7	10.3
		II	BD —8° 5817	7.0	E.	23 25.6	46	-0.4	-0.2	10.4
		12	$BD - 5^{\circ} 5885$	5.9	E.	23 0.9	124	-1.9	-3.4	11.4
		17	38 Arietis	5.2	A.	23 24.6	239	-1.4	+1.3	16.4
		19	63 Tauri	5.7	A.	22 43.9	305	-1.7	-o.2	18.4
		22	$BD + 17^{\circ} 1182$	5.7	A.	2 17.5	334	_		20.6
		22	$BD + 16^{\circ} 1363$	6.0	A.	23 18.8	247	-0.4	+2.1	21.5
		25	α Cancri	4.3	E.	1 59.0	121	—o.8	+0.4	23.6
		25	α Cancri	4.3	A.	3 5.7	266	-1.2	+1.2	23.6
	Nov.	17	130 Tauri	5.5	A.	19 0.6	266	0.0	+1.5	17.9
		20	$BD + 13^{\circ} 1940$	6.4	A.	21 35.4	241	+o.1	+2.3	21.0
		24	79 Leonis	5.5	A.	2 20.6	288	<b>—0.7</b>	+0.8	24.2
	Dez.	4	BD -12° 5998	6.8	E.	15 56.9	57	-1.3	+0.4	5.3
		4	BD -12° 6005	6.5	E.	16 24.9	48	-1.2	+0.4	5.3
		5	ρ Aquarii	5.4	E.	18 29.8	60	-1.0	-0.3	6.4
		7	BD -0° 4585	6.0	E.	20 27.3	7	-0.2	+2.6	8.5
		8	BD +2° 80	6.6	E.	17 49.2	106	-2.1	-0.3	9.4
		9	BD +6° 228	6.7	E.	22 7.9	118	-1.3	-2.9	10.5
		16	26 Geminorum	5.1	A.	3 43.5	331	-o.1	-3.3	16.7
		18	BD +13° 1940	6.4	A.	4 46.2	212		_	18.8
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# Ein- und Austritte für Frankfurt a. M.

Tag	5	Stern	Größe	Phase	Welt-Zeit	P	а	b	Alter des Mondes
1940	0						- 7		
Jan.	12	$BD - 9^{\circ} 5854$	6.8	E.	16 42.5	33	-o.6	+o.5	3.I
oun.	16	$BD + 6^{\circ} 135$	6.9	E.	21 3.8	5	→ I	-	7.3
	16	$BD + 5^{\circ} 131$	6.3	E.	21 36.6	139	_	_	7.3
	20	δ Tauri	3.9	E.	21 52.0	111	-1.3	-I.8	11.3
	20	64 Tauri	4.8	E.	22 44.1	145	-0.7	-4.1	11.3
	20	68 Tauri	4.2	E.	23 38.7	16			11.4
	22	$BD+$ 18 $^{\circ}$ 1112	6.4	E.	17 12.9	102	-0.6	+1.1	13.2
	23	λ Geminorum	3.6	E.	20 31.6	127	-1.3	-0.5	14.3
	28	$BD + 0^{\circ} 2782$	6.3	A.	2 27.1	274	-1.6	-0.2	18.5
Febr.	I	ν Librae	5.3	A.	2 59.7	235	-1.7	+2.6	22.6
	20	BD +16° 1363	6.0	E.	2 41.0	113	+0.2	-1.6	11.8
	25	$BD - 5^{\circ} 3569$	6.3	A.	22 31.5	0	_	_	17.7
März		BD +10° 275	6.8	E.	19 2.2	41	-0.5	+o.1	3.7
	16	115 Tauri	5.3	E.	18 2.9	124	-r.6	-1.9	7.7
	16	BD +18° 873	7.0	E.	20 41.7	45	-1.3	+0.4	7.7
	19	68 Geminorum	5.1	E.	0 58.1	29			9.9
	19	BD +14° 1879	7.I	E.	19 42.5	100	-1.5	-0.2	10.7
	21	ω Leonis	5.5	E.	0 34.0	157	0.2	-2.5	11.9
	25	λ Virginis	4.6	A.	23 58.9	245	-1.8	+1.5	16.9
	29	BD -19° 4605	6.5	A.	3 35.0	297	-1.5	-0.1	20.0
April		51 Geminorum	5.3	E.	23 16.8	119	+0.2	-1.8	7.1
-	17	х Cancri	5.1	E.	0 16.7	89	-0.2	-1.4	9.1
	17	$BD + 8^{\circ}$ 2289	6.7	E.	20 3.7	43	_	_	10.0
	27	BD —18° 5079	6.5	A.	2 36.6	272	-r.6	+0.6	19.3
Mai	12	BD +15° 1676	7.2	E.	20 40.2	132	-0.1	-2.2	5.2
	13	A <sup>2</sup> Cancri	5.7	E.	21 6.0	91	-0.5	-1.5	6.4
	19	λ Virginis	4.6	E.	20 2.9	155	-0.6	-0.9	12.4
	25	ρ Sagittarii	4.0	E.	1 35.3	92	-1.6	+0.5	17.6
Juni	13	$BD - 2^{\circ} 3478$	6.9	E.	21 4.2	147	-0.7	-2.1	7.8
Juli	15	$BD-18^{\circ}$ 4302	7.1	E.	20 59.0	85	-1.6	-0.2	10.4
	25	73 Piscium	6.2	A.	23 4.9	228	-0.1	+2.2	20.5
	28	38 Arietis	5.2	A.	2 13.8	182	- "	_	22.7
	30	63 Tauri	5.7	A.	I 6.1	272	0.0	+1.4	24.6
Aug.	12	BD —19° 4605	6.5	E.	20 38.3	102	-1.6	-0.9	9.0
	27	$BD + 16^{\circ} 672$	5.7	A.	0 50.8	221	+0.1	+2.5	23.2
Sept.	9	BD —19° 4800	7.3	E.	20 9.1	77	-1.3	-0.7	7.7
	II	BD —17° 5746	7.x	E.	18 33.2	141	-11	_	9.6
	12	BD -14° 5839	7.0	E.	22 35.5	115	-1.9	-1.9	10.8
	13	BD —12° 6005	6.5	E.	18 44.2	90	-1.3	+1.3	11.7
	14	ϑ Aquarii	4.3	E.	20 54.1	3	_	_	12.7
	14	ρ Aquarii	5.4	E.	21 0.2	99	-2.0	-o.1	12.8
	22	α Tauri	1.1	E.	21 38.9	158	—	_	20.8
	22	α Tauri	1.1	A.	21 50.7	181		~_	20.8
Okt.	11	<i>BD</i> −9° 5908	7.2	E.	19 50.6	41	<b>-1.2</b>	+1.3	10.3
	11	$BD$ —8 $^{\circ}$ 5817	7.0	E.	23 21.3	41	<b>—0.6</b>	+0.1	10.4

#### Ein- und Austritte für Frankfurt a. M.

Та	or D	Stern	Größe	Phase	Welt-Zeit	P	а	b	Alter des Mondes
194	0		1 2						
Okt.	12	$BD - 5^{\circ} 5885$	5.9	E.	22 46.7	115	-2.0	-2.3	11.4
	13	$BD - 5^{\circ} 5894$	6.4	E.	0 26.2	143	-	_	11.5
	17	38 Arietis	5.2	A.	23 11.0	244	-1.4	+1.5	16.4
	19	63 Tauri	5.7	A.	22 30.4	312	-1.6	-0.3	18.4
	22	$BD+17^{\circ}$ 1182	5.7	A.	2 5.5	331	_	_	20.6
	22	$BD + 16^{\circ} 1363$	6.0	Α.	23 14.5	250	-0.2	+2.0	21.5
	25	α Cancri	4.3	E.	I 52.2	123	-0.7	+0.5	23.6
	25	α Cancri	4.3	A.	2 55.1	262	-1.0	+1.6	23.6
Nov.	10	$BD - 2^{\circ} 5973$	6.6	E.	0 0.1	28	-0.3	-+-0.6	10.0
	II	$BD+1^{\circ}28$	7.3	E.	0 57.6	97	<b>-0.</b> 5	-1.9	II.I
_	24	79 Leonis	5.5	A.	2 14.3	282	-0.5	+1.1	24.2
Dez.	4	$BD - 12^{\circ} 6005$	6.5	E.	16 14.2	42	-1.2	+0.9	5.3
	5	ρ Aquarii	5.4	E.	18 20.5	54	-1.2	+0.2	6.4
	7	$BD - 0^{\circ} 4585$	6.0	E.	20 23.2	359	-		8.5
	8	$BD + 2^{\circ} 80$	6.6	E.	17 31.9	98	-1.9	+0.5	9.4
	9	$BD + 6^{\circ} 228$	6.7	E.	21 58.2	118	-1.7	-2.7	10.5
	16	26 Geminorum	5.1	A.	3 44.0	319	<b>—0.</b> 5	2.8	16.7
	18	29 Cancri	5.9	A.	1 12.5	355	_	_	18.7
	20	43 Leonis	6.3	A.	5 34.6	320	-0.9	-2.0	20.8

Ein- und Austritte für Königsberg

Tag	Stern	Größe	Phase	Welt-Zeit	P	a	ь	Alter des Mondes
1940								
Jan. 12	BD −9° 5854	6.8	E.	16 48.7	30	-0,3	+0.2	3.1
20	$BD + 16^{\circ} 569$	6.3	E.	16 5.4	75	-0.9	+1.6	11.1
20	δ Tauri	3.9	E.	21 58.0	93	-0.9	-1.4	11.3
20	64 Tauri	4.8	E.	22 38.5	119	-o.6	-2.3	11.3
22	$BD+$ 18 $^{\circ}$ 1112	6.4	E.	17 26.8	98	-o.8	+1.1	13.2
22	$BD+17^{\circ}$ 1182	5.7	E.	19 31.7	156	_	_	13.4
23	λ Geminorum	3.6	E.	20 45.5	112	-1.3	-0.2	14.3
28	$BD + 0^{\circ} 2782$	6.3	A.	2 40.0	294	-1.1	-1.0	18.5
Febr. 1	ν Librae	5-3	A.	3 25.4	260	-1.4	+1.0	22.6
16	$BD + 16^{\circ} 527$	6.9	E.	17 31.9	64	-1.4	+0.5	8.4
19	26 Geminorum	5.1	E.	16 49.7	54	-0.9	+2.4	11.4
März 11	ζ¹ Piscium	5.6	E.	17 54.4	8	_	_	2.6
II	$BD + 6^{\circ} 175$	6.5	E.	17 55.3	9	-0.4	+2.2	2.6
16	115 Tauri	5.3	E.	18 11.6	106	-1.2	-1.4	7.7
17	$BD + 17^{\circ}$ 1224	6.8	E.	18 0.8	119	-1.3	-1.4	8.7
18	λ Geminorum	3.6	E.	16 55.0	52	-1.4	+2.3	9.6
19	BD +14° 1879	7.1	E.	19 59.2	79	-1.4	-0.1	10.7

Ein- und Austritte für Königsberg

Tag	Stern	Größe	Phase	Welt-Zeit	P	а	b	Alter des Mondes
1940								
März 21	ω Leonis	5·5	E.	o 26.4	138°	-0.2	m	11.9
26	λ Virginis	4.6	A.	0 21.1	267	-1.4	+0.2	16.9
Mai 12	BD +15° 1676	7.2	E.	20 31.7	116	0.0	-ı.8	5.2
13	A <sup>2</sup> Cancri	5.7	E.	21 4.5	76	-0.3	-1.4	6.4
17	BD −4° 3268	6.7	E.	19 41.6	170	-0.4	-2.1	10.3
19	λ Virginis	4.6	E.	20 10.2	132	-1.0	-0.3	12.4
Juni 13	$BD - 2^{\circ} 3478$	6.9	E.	21 2.5	135	-0.6	-2.0	7.8
Juli 15	BD -18° 4302	7.1	E.	21 14.0	79	-1.2	-0.6	10.4
24	777 0 0	6.4	A.	21 53.9	186	0.0	+3.1	19.4
25	73 Piscium	6.2	A.	23 18.4	228	-0.4	+2.2	20.5
Aug. 27	$BD + 16^{\circ} 672$	5.7	A.	I 3.3	222	-0.2	+2.7	23.2
Sept. 8	29 Ophiuchi	6.4	E.	18 22.6	80	-1.I	o.8	6.7
10	BD —18° 5115	6.9	E.	18 10.7	114	-1.5	-0.3	8.6
11	BD -17° 5746	7.1	E.	18 51.8	138	-	_	9.6
12	BD —14° 5839	7.0	E.	22 45.4	118	-1.4	-2.3	10.8
13	BD -12° 6005	6.5	E.	19 5.3	88	-I.4	+o.8	11.7
14	ϑ Aquarii	4.3	E.	20 23.3	6		_	12.7
14	ρ Aquarii	5.4	E.	22 10.2	103	-1.7	-0.8	12.8
22	α Tauri	1.1	E.	4 46.7	158		_	20.8
Okt. 11	<i>BD</i> −9° 5908	7.2	E.	20 8.5	44	-r.o	+0.6	10.3
12	BD -5° 5885	5.9	E.	22 56.1	113	-1.4	-2.4	11.4
13	$BD - 5^{\circ} 5894$	6.4	E.	0 20.9	127	-0.9	-3.7	11.5
17	38 Arietis	5.2	A.	23 32.9	246	-r.4	+o.8	16.4
19	63 Tauri	5.7	A.	22 48.2	315	-1.8	-o.8	18.4
22	BD +16° 1363	6.0	A.	23 27.6	255	-o.5	+1.9	21.5
25	α Cancri	4.3	E.	2 4.0	110	-0.8	+0.8	23.6
25	α Cancri	4.3	A.	3 13.2	278	-r.r	+0.7	23.6
OV. 17	130 Tauri	5.5	A.	19 6.5	270	-o.1	+r.6	17.9
20	BD +13° 1940	6.4	Α.	21 43.3	250	0.1	-+-2.I	21.0
21	A <sup>1</sup> Cancri	5.7	A.	2 44.0	228	-1.9	+2.7	21.2
21	6 Leonis	5.3	A.	23 53.0	221	-0.5	+4.3	22.I
24	79 Leonis	5.5	A.	2 25.3	300	-0.7	+0.5	24.2
Dez. 4	BD —12° 5994	6.6	E.	15 15.6	131	-	-	5.3
4	BD —12° 5998	6.8	E.	16 2.1	54	-1.1	+0.2	5.3
4	BD -12° 6005	6.5	E.	16 29.8	45	-0.9	+0.3	5.3
5	ρ Aquarii	5.4	Ε.	18 31.9	54	-o.8	-0.3	6.4
6	$BD - 5^{\circ} 5917$	6.6	E.	16 25.2	140	-	-	7.3
8	BD +2° 80	6.6	E.	17 54.8	101	-1.8	-0.3	9.4
9	BD +6° 228	6.7	E.	22 2.9	105	-1.0	-2.1	10.5
16	26 Geminorum	5.1	Α.	3 27.5	355		_	16.7
18	BD +13° 1940	6.4	A.	4 54.0	234	-1.2	-0.4	18.8

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# Ein- und Austritte für München

Ta	ıg	Stern	Größe	Phase	Welt-Zeit	P	a	ь	Alter des Mondes
19.	10								
Jan.	12	BD -9° 5854	6.8	E.	16 43.6	42	o.6	+0.2	3.I
o wiii	16	$BD + 6^{\circ} 135$	6.9	E.	21 0.8	18	-0.5	+1.7	7.3
	20	δ Tauri	3.9	E.	21 59.4	117	-1.2	-2.1	11.3
	20	64 Tauri	4.8	E.	22 54.4	154	_		11.3
	20	68 Tauri	4.2	E.	23 38.2	25	_		11.4
	22	BD +18° 1112	6.4	E.	17 13.1	110	-0.8	+0.8	13.2
	23	λ Geminorum	3.6	E.	20 37.2	135	-1.4	-1.0	14.3
	28	BD +0° 2782	6.3	A.	2 32.2	272	-1.7	-0.3	18.5
Febr		v Librae	5.3	A.	3 0.1	232	-2.0	+2.7	22.6
01	16	BD +16° 527	6.9	E.	17 14.9	80	-r.8	+0.4	8.4
	25	$BD - 5^{\circ} 3569$	6.3	A.	22 36.4	353	0.0	-2.2	17.7
März	II	ζ¹ Piscium	5.6	E.	17 44.9	41	-0.5	+0.2	2.6
	II	BD +6° 175	6.5	E.	17 45.8	41	-o.5	+0.2	2.6
	12	BD +10° 275	6.8	E.	19 3.6	47	-0.4	-0.1	3.7
	16	115 Tauri	5.3	E.	18 11.9	132	-1.5	-2.5	7.7
	16	BD +18° 873	7.0	E.	20 45.3	49	-1.3	+0.1	7.7
	17	BD +17° 1224	6.8	E.	18 1.4	147	-1.5	-3.1	8.7
	19	68 Geminorum	5.1	E.	0 59.3	33		-	9.9
	19	$BD + 14^{\circ} 1879$	7.1	E.	19 47.8	104	-1.6	-o.5	10.7
	21	ω Leonis	5.5	E.	0 39.7	158	-0.1	-2.6	11.9
	26	λ Virginis	4.6	A.	0 1.6	243	-2.0	+1.5	16.9
	29	BD -19° 4605	6.5	A.	3 40.1	294	-1.7	-o.2	20.0
April	17	и Cancri	5.1	E.	0 19.7	91	-0.1	-1.4	9.1
•	17	$BD + 8^{\circ}$ 2289	6.7	E.	20 16.9	47	_	-	10.0
	27	BD —18° 5079	6.5	A.	2 40.5	269	-1.7	+0.5	19.3
$\mathbf{Mai}$	12	$BD + 15^{\circ} 1676$	7.2	E.	20 44.6	133	0.0	-2.1	5.2
	13	A <sup>2</sup> Cancri	5.7	E.	21 10.3	93	-0.5	-1.5	6.4
	19	λ Virginis	4.6	E.	20 6.6	157	-o.6	-r.i	12.4
	25	ρ Sagittarii	4.0	E.	I 39.5	95	-1.8	+0.3	17.6
Juni	13	BD −2° 3478	6.9	E.	21 10.5	148	-0.7	-2.2	7.8
Juli	15	BD -18° 4302	7.1	E.	21 4.4	87	-1.7	-0.4	10.4
	25	73 Piscium	6.2	A.	23 1.1	224	-0.2	+2.3	20.5
	30	63 Tauri	5.7	A.	I 3.2	266	0.0	+1.5	24.6
Aug.	9	BD —12° 4055	6.7	E.	19 25.4	130	-1.1	-r.8	6.0
	12	BD —19° 4605	6.5	E.	20 44.8	105	-1.6	-1.0	9.0
	27	$BD + 16^{\circ} 672$	5.7	A.	0 45.1	212	+o.2	+2.9	23.2
Sept.	8	29 Ophiuchi	6.4	E.	18 14.8	87	-1.6	-o.5	6.7
_	9	BD -19° 4800	7.3	E.	20 14.3	82	-1.3	-0.9	7-7
	II	BD —17° 5746	7.1	E.	18 41.7	149	_	_	9.6
	12	BD —14° 5839	7.0	E.	22 46.2	127	-2.3	-2.9	10.8
	13	BD -12° 6005	6.5	E.	18 46.0	93	-1.5	+1.1	11.7
	14	artheta Aquarii	4.3	E.	19 59.6	12	-o.8	+3.0	12.7
	14	ρ Aquarii	5.4	E.	21 57.2	107	-2.3	-o.6	12.8
Okt.	II	BD -9° 5908	7.2	E.	19 52.3	48	-r.4	+1.1	10.3
	II	$BD - 8^{\circ} 5817$	7.0	E.	23 23.3	50	-0.7	-0.2	10.4
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#### Ein- und Austritte für München

Та	g	Stern	Größe	Phase	Welt-Zeit	P	a	b	Alter des Mondes
194	.0	i.							
Okt.	12	$BD - 5^{\circ} 5885$	5.9	_E.	22 59.3	129	m	m	11.4
	17	38 Arietis	5.2	A.,	23 12.2	236	-1.4	+1.6	16.4
	19	63 Tauri	5.7	A.	22 35.1	301	-1.5	+0.2	18.4
	22	$BD+$ 17 $^{\circ}$ 1182	5.7	A.	2 15.9	319	-1.8	-2.0	20.6
	22	$BD + 16^{\circ} 1363$	6.0	A.	23 11.0	243	-0.2	+2.2	21.5
	25	α Cancri	4.3	E.	1 53.8	130	0.8	+0.1	23.6
- 241	25	α Cancri	4.3	A.	2 54.6	256	-1.1	+1.8	23.6
Nov.	10	$BD - 2^{\circ} 5973$	6.6	E.	0 0.3	38	-0.3	+0.2	10.0
	II	$BD+1^{\circ}$ 28	7.3	E.	1 3.0	105	-0.5	-2.2	11.1
	17	130 Tauri	5.5	A.	18 56.4	264	+0.1	+1.5	17.9
	24	79 Leonis	5.5	A.	2 13.7	276	-0.6	+1.2	24.2
Dez.	4	BD —12° 6005	6.5	E.	16 16.4	48	-r.4	+0.7	5.3
	5	ρ Aquarii	5.4	E.	18 24.1	61	-1.3	-o.1	6.4
	7	BD —o° 4585	6.0	E.	20 17.9	15	-0.5	+2.1	8.5
	8	$BD + 2^{\circ} 80$	6.6	E.	17 37.8	107	-2.3	-o.r	9-4
	9	BD +6° 228	6.7	E.	22 10.1	130	-	_	10.5
	16	26 Geminorum	5.1	A.	3 50.6	315	-0.4	-2.6	16.7
	18	29 Cancri	5.9	A.	I 24.3	344	_		18.7
	20	43 Leonis	6.3	A.	5 41.3	319	-0.9	-2.1	20.8

O <sup>h</sup> Welt-Zei		Mondbew	egung		1	ge des Mor gen den E		
	8	$L_{\mathbb{C}}$	$\tilde{\omega}_{c}$	$M_{\mathbb{G}}$	i	Δ	Ω'	4-8
1940								1
Jan. —	205.8180	105.1230	161.33	303.79	24.838 6	24.364	1.596	358.544
+(	_	236.8869	162.44	74.44	24.844 6	22 862	T 767	2=0 ==0
16		8.6509	163.56	205.09	24.850 6	22 262	T 524	258 600
26	1 100		164.67	335.74	24.856	22 86T	T 502	258 620
Febr.		272.1788	165.78	106.39	- 106-3	22 260 501	T 472	258 657
,					Ų.	501	3	-9
15		43.9428	166.90	237.04	24.867	21.859 501	1.440	358.686
25			168.01	7.69	24.872	21.358 501	1.409 32	358.715 29
März 6		307.4707	169.13	138.34	24.877	20.857 501	1.377 31	358.744 29
16		79.2347	170.24	268.99	24.882	20.356 <sub>501</sub>	1.346	358.773 29
26	201.0522	210.9987	171.36	39.64	24.887	19.855 500	1.314 32	358.802 29
April 5	200.5227	342.7626	172.47	170.29	24.891	19.355 501	1.282	358.831
I		114.5266	173.58	300.94	24.896	18.854 500	1,250 32	258 860
2			174.70	71.59	24.900	18.354 501	1.218	258 880
Mai		18.0545	175.81	202.24	24.905	17.853 500	т т86 34	258.0T8 <sup>29</sup>
1		149.8185	176.93	332.89	24.909	17.353 500	1.154 32	358.948 30
25	197.8750	281.5825	178.04	103.54	24.913	16.853 500	1.121	358.977 30
Juni 4	197.3454	53.3464	179.15	234.19	24.917	16.353	1.089	359.007 29
14	196.8159	185.1104	180.27	4.84	24.921	15.853 500	1.050	359.036
2/	196.2863	316.8744	181.38	135.49	24.925	15.353 500	1.024 33	359.066
Juli 2	70.00	88.6383	182.50	266.14	24.929 3	14.853 499	0.991 33	359.095 30
IZ	, ,,		183.61	36.79	24.932	14.354 500	0.959 33	359.125 30
24			184.72	167.44	24.936	13.854 500	0.926	359.155 30
Aug. 3		123.9302	185.84	298.09	24.939 4	13.354 499	0.893	359.185 30
13			186.95	68.74	24.943	12.855	0.861	359.215 30
23	193.1091	27.4582	188.07	199.39	24.946	12.355 499	0.828 33	359-245 30
Sept. 2	192.5796	159.2221	189.18	330.04	24.949	11.856	0.795 33	359-275 30
12	192.0500	290.9861	190.29	100.69	24.952	11.356 499	0.762	359.305 30
22	191.5205	62.7501	191.41	231.34	24.955	10.857 500	0.729 33	359-335 31
Okt. 2	190.9909	194.5140	192.52	1.99	24.957	10.357	0.696 33	359.366 30
12	190.4614	326.2780	193.64	132.64	24.960 2	9.858 500	0.663 33	359.396 31
22	7 70 7	98.0420	194.75	263.29	24.962	9.358 499	0.629 33	359.427 30
Nov.		229.8059	195.86	33.94	24.964 2	8.859	0.596	359-457
11		1.5699		164.59		8.360	0.503	359.487
21		133-3339	198.09	295.24	24.968	7.861	0.529 33	359.518
Dez.	1 31	265.0978	199.21	65.89	24.970	7.362 499	0.496	359.548 31
1:	1 '	36.8618	200.32	196.54	24.971 2	6.863 499	0.462	359.579 30
2	1011	168.6258	201.43	327.19	24.973 2	6.364	0.429 34	359.609 31
3:		300.3898	202.55	97.84	24.975	5.865 499	0.395 33	359.640 30
4:	1   185.6956	72.1537	203.66	228.49	24.976	5.366	0.362	359.670

T\* 40

To a			Oh Welt-Zeit	
Tag		$\alpha_{\mathbb{C}} - \alpha_k$	$\delta_{\mathbb{C}} - \delta_k$	$\log \sin  p_k$
1940	)			
Jan.	1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	+159.2 " $-5.9$ $+142.3$ $-5.7$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
	3	- 8.17 -1.61 +o.11	+119.7 $-22.6$ $-5.3$	8.23345 -334 - 24
Jan.	18	- 1.03 +o.62 **	+ 57.4 +27.1	8.20673 8 auton +517
	20	+0.60	+84.5  +100.0 +24.5 -3.7	8.21807 +617 + 63
	21	+ 0.74 + 0.55 + 0.15	+129.8 +16.4 -4.4	8.22487 +680 + 18
	22	+ 1.14 +0.12 +0.43	+140.2 -4.5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
	24	+ 0.95 -0.49	+166.0 + 7.9 -3.4	8.24391 +551 -156
	25 26	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	+170.5 + 1.4 -3.1  +171.9 -3.7 -3.7	8.24987 +201 -207
	27 28	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	29	$-6.86$ $^{-2.08}$ $+0.04$	$+149.0 \begin{array}{c} -13.4 \\ -20.4 \end{array} -7.0$	8.24423 -358 -110
	30 31	-8.90 -1.82 +0.22	+120.0 $-27.0$ $-5.2$	8.23425 -530 - 18
Febr.	I 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} + 69.4 \\ + 34.2 \\ -35.2 \\ + 0.3 \\ \end{array}$	$\begin{bmatrix} 8.22877 & -548 & + 17 \\ 8.22346 & -531 & + 36 \end{bmatrix}$
Febr.	16	+ 0.15	+105.6	8,21066
L'OUL.	17	+ 1.13 +0.98 -0.03 +0.95 +0.95	+105.0 +22.0 +5.1 +16.9 -5.1	8.21661 +595 + 84
	18	- 2.00 +0.73	+144.5 $+11.2$ $-5.7$ $+155.7$ $-5.3$	$\begin{array}{c} 8.22340 & + 48 \\ 8.23067 & + 727 \\ & & & & & & & & & & & & & & & & & & $
	20	$+ 3.11 \begin{array}{c} +0.30 \\ -0.32 \end{array}$	+161.6 + 5.9 -4.0	8.23791 + 657 - 67
	21	+2.79 $+1.74$ $-1.05$ $-0.68$	+162.0 $-0.6$ $-1.0$	8.24448 +522 -191 8.24070 +522
	23	$+ 0.01 \begin{array}{r} -1.73 \\ -2.20 \end{array} -0.56$	+160.4 - 2.5 - 2.4	8.25301 +100 -231
	24 25	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+155.5 - 9.1 -4.2  +146.4 -15.5 -6.4	8.25401 —242 8.25259 —257 —215
	26	-7.03 -2.56 +0.10	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8.24902 -357 -170 8.24375 -107
	27 28	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$+77.9 \frac{-30.0}{-24.9} -4.9$	$8.23741 \begin{array}{r} -634 \\ -680 \end{array} - 46$
März	29 I	-13.75 -0.60 +0.04 +0.82	$\begin{array}{c} + 43.0 \\ + 6.6 \\ -36.4 \\ \pm 2.4 \\ \end{array}$	8.23061 + 9
marke Ed	2	-14.12 +0.23 +0.72	-27.4 $-34.0$ $+6.0$	8.21768 -622 + 74

Tag			Oh Welt-Zeit	
195	5	$\alpha_{\mathbb{C}} - \alpha_k$	$\delta_{_{\mathbb{C}}} - \delta_k$	$\log \sin p_k$
1940	0			1 141
März	17	+ 2.66 +0.96	+153.4 + 6.3	8.22169 +663
	18	+ 3.02 -0.49	+159.7 + 0.6 -5.7	8.22832 +687 + 24
	19	+ 4.09	+160.3 - 3.3 - 3.9	8.23519 -6ro - 28
	20	+3.86 - 0.82	+157.0 - 6 -2.3	0.24178 89
	21	$+ 2.81 \begin{array}{r} -0.77 \\ -1.82 \end{array}$	-+151.4 - 67	0.24740
	22	$+$ 0.99 $_{-2.48}$ $^{-0.66}$	+144.7 - 8.2	8.25109 -204
	23	$-1.49_{-2.02}^{-0.44}$	+130.5 -11.7 -3.5	8.25380 _ 20 -237
	24	$-4.41_{-2.06}^{-0.14}$	+124.8 -17.5 -5.8	8.25366257 -237
	25	$-7.47_{-2.86}^{+0.20}$	+107.3 -7.2	8.25109 -464 -207
	26	$-10.33_{-2.31}^{+0.55}$	- 02.0 -21.5	8.24045 _6.8 -154
	27	-12.04 -1.47 +0.84	T 51.1 -25.5 -4.0	8.24027 88
	28	-14.11 <sub>-0.48</sub> +0.99	+ 15.0 -25 4 +0.1	0.23321 - 23
	29	-14.59 + 0.91	- 19.0 -21 0 T4.4	0.22592 -608 7 31
	30	-14.10 +1.12 +0.70	$-50.8_{-23.3}^{+7.7}$	8.21894 -624 + 74
	31	-13.03 + 1.52 + 0.39	- 74.1 <sub>-12.7</sub> +9.0	8.21270 + 99
April	I	-11.51 +0.11	— 87.8 · · · · · · · · · · · · · · · · · · ·	8.20745 +114
April	15	+ 3.42 +0.44	+160.1 - 3.5 - 2.8	8.22717 +562
	16	- 3.00 -0.08	-150.0 - 7.2 -3.3	8.23279 + 554 - 8
	17	+ 3.62 -0.75	+149.3 - 9.3	6.23633 = 53
	18	+ 2.03 -1.71 -0.72	+140.0 $-10.5$ $-1.2$	8.24334 -100
	19	- 0.92 -0.03	+129.5 -12.0	0.24/35
	20	-1.42 -2.78 -0.44	+117.5 -3.0	0.24907 + 62 -190
	21	-4.20 $-0.16$ $-2.94$	+102.5 -5.0	8.25049 -146 -208
	22	$-7.14_{-2.76}^{+0.18}$	$+82.5_{-26}$ $-6.1$	8.24903
	23	- 9.90 <sub>-2.20</sub> +0.56	$+56.4_{-31.5}$	8.24550
	24	-12.10 +0.87	+ 24.9 -34.0 -2.5	8.24040624 -118
	25	-13.43 -0.97	- 9.1 <sub>-32.3</sub> +1.7	8.23400 57
	26	-13.79 + 0.52 + 0.88	$-41.4_{-26.2}$ +6.0	0.22/15 -600
	27	-13.27 +1.11 +0.59	— 07.7 <sub></sub> +8.8	8.22025 -620 + 51
	28	-12.10 +1.42 +0.31	-65.2 - 76	8.21380 + 91
	29	-10.74 +0.04	-92.8 + 2.2 + 9.8	0.20030 -170
	30	- 9.28 · ···40 -0.12	— 90.6 +8.6	8.20408 +123
M-!			in the second	0. 6.
Mai	15	+ 2.19 -1.05	+142.9	8.23643 +339
	16	$+1.14_{-1.62}$	+130.8 -127 -1.6	8.23982 - 07
	17	- 0.48 -2.09 -0.47	+117.1	8.24254 99
	18	-2.57 $-2.41$ $-0.32$	+101.4 -18.8 -3.1	0.24427 - 11
	19	- 4.90 <sub>-2.40</sub> -0.00	$+82.6 \begin{array}{c} -23.1 \end{array}$	0.244/1 -105
	20	-7.47	$+$ 59.5 $_{-27.6}$ $^{-4.5}$	0.24300 -261
	21	$-9.73_{-1.72}^{+0.54}$	+31.9 -30.7	8.24105 -143
	22	-11.45 -0.70	+ 1.2 -0.3	8.23701 -510 -115
	23	-12.39 +0.84	-29.8 +3.7	8.23182 5.9 - 70

Та		11100	Oh Welt-Zeit	
14	5	$\alpha_{\mathbb{C}} - \alpha_k$	$\delta_{\odot} - \delta_k$	$\log \sin p_k$
194	0			
Mai	23 24 25 26 27 28 29 30	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 8.23182 \\ 8.22593 \\ 8.21982 \\ -611 \\ +26 \\ 8.21397 \\ -585 \\ +67 \\ -518 \\ +101 \\ 8.20462 \\ -417 \\ +122 \\ 8.20167 \\ -295 \\ 8.20005 \\ -162 \\ +133 \\ \end{array}$
Juni	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} +123.7 \\ +107.1 \\ -19.5 \\ +87.6 \\ -22.9 \\ -3.4 \\ -26.4 \\ -3.5 \\ -3.5 \\ -3.5 \\ -20.0 \\ -20.1 \\ -20.1 \\ -26.9 \\ -20.1 \\ -26.9 \\ -26.9 \\ -26.9 \\ -26.9 \\ -26.9 \\ -26.9 \\ -26.9 \\ -26.9 \\ -21.3 \\ +8.0 \\ -31.3 \\ -8.0 \\ -85.7 \\ -80.8 \\ -67.9 \\ -48.3 \\ -67.9 \\ -48.3 \\ -23.8 \\ +24.5 \\ +3.4 \\ +29.6 \\ +17 \\ +33.7 \end{array}$	$\begin{array}{c} 8.23856 \\ 8.23930 \\ 8.23938 \\ -70 \\ 8.23868 \\ -70 \\ -88 \\ 8.23710 \\ -253 \\ -95 \\ 8.23457 \\ -345 \\ -78 \\ 8.22689 \\ -423 \\ -423 \\ -423 \\ -501 \\ -490 \\ +48 \\ 8.20710 \\ -490 \\ +48 \\ 8.20710 \\ -257 \\ -257 \\ -131 \\ 8.20159 \\ -131 \\ -257 \\ +126 \\ 8.20033 \\ +137 \\ 8.20175 \end{array}$
Juli	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	- 5.82 -1.85 +0.18 - 7.67 -1.67 +0.35 - 10.66 -0.81 +0.51 - 11.47 -0.23 +0.55 - 11.38 +0.72 +0.40 - 10.66 +0.95 +0.04 - 10.66 +0.95 +0.04 - 8.72 +0.95 -0.09 - 6.91 +0.77 +0.86 - 6.91 +0.77 -0.05 - 5.42 +0.73 +0.07 - 3.89 +0.92 +0.13 - 1.92 +0.88	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8.23865 8.23668 —197 — 48 8.23423 —285 — 40 8.23138 —322 — 33 8.22816 —355 —28 8.22461 —383 — 18 8.21677 —405 — 4 8.21272 —388 —17 8.20884 —349 —64 8.20250 —197 —108 8.20053 —89 —124 8.19964 —35 —133 8.20167 —89 —124 8.19999 —168 —134 8.20469 —197 8.20469 —197

			Oh Welt-Zeit	
Tag		$\alpha_{\mathbb{C}} - \alpha_k$	$\delta_{\mathbb{C}} - \delta_k$	$\log \sin p_k$
1940				
Aug.	10	-10.46	+ 55.7 _20.2	8.23666
	II	-11.80 <sup>-1.43</sup> +0.61	+ 254 30.3 -10	8.23233 -433 - 13
	12	-12.7I +0.66	- 5.0 <sup>31.3</sup> +2.1	8.22787 + 6
	13	-T2 87 +0 60	$-35.1^{-29.2} +5.2$	8.22347 -440 + 17
	14	-12.42 ±0.42	50 T 24.0	8.21024 +23 + 22
	15	$-11.57$ $^{+0.86}$ $^{+0.22}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8 21522 -401 + 26
	16	-10.49 +1.11 +0.03	- 83.8 - 6.0 +9.0	8.21148 -3/5 + 31
	17	- 9.38 -0.08	-82.8 + 1.0 + 8.3 + 9.3 + 7.3	$8.20804 \frac{-344}{-307} + 37$
	18	-8.35 + 0.89 - 0.14	-73.5 + 16.4 + 7.1	$\begin{array}{c} -307 \\ -263 \\ \end{array} + 44$
	19	-7.46 $+0.77$ $-0.12$	$-57.1_{+22.2}^{+10.4} +5.8$	8.20234 + 58
	20	- 0.09 -0.71	-34.9	5.20029 - T2T + 74
	21	- 5.98 +0.72 +0.01	- 0.4 +20.2 +2.8	8.19898 + 91
	22	- 5.20 +0.81 +0.09	+ 20.9 +30.4	8.19858 + 67 +105
	23	- 4.45 +0.07 +0.16	+ 51.3 +20.7	8.19923 +182 +117
	24	- 3.48 +1.17 +0.20	$+81.0_{+27.2}$	8.20105 +124
	25	- 2.3I <sub>+1.36</sub> +0.19	$+108.2 \begin{array}{c} -4.3 \\ +22.0 \end{array}$	8.20411 +125
	26	- 0.95 +1.45 +0.09	+131.1 $-5.9$	0.20042 +114
	27	+ 0.50 -0.09	+148.1 <sup>+17.0</sup> -6.9	8.21387 1343 + 92
~		8		
Sept.	9	-14.28 +o.31	- 29.5 -27.1 "	8.22706
	10	-13.97 +0.56	- 56.6 - +7.4	0.22134 - + 49
	II	-13.10 +0.32	-76.3 +8.9	0.21011 + 02
	12	-11.91 +0.09	- 87.I _ +9.4	0.21150 -202 + 09
	13	-10.63 <sup>+1.19</sup> -0.09	- 00.5 _ 7.4 +0.0	8.20758 + 68
	14	- 9.44 -0.16	- 81.1 +7.5	8.20434 + 65
	15	- 8.41 +0.86 -0.17	- 00.2 +0.2	8.20175 + 64
	16	- 7.55 +0.73 -0.13	$-45.1_{+25.9}^{+25.9}$	0.19900 -120 + 05
	17	-6.82 +0.69 +0.07 $-6.13 +0.69 +0.07$	-19.2 + 3.1 + 9.8 + 1.6	8.19850 - 63 + 67
	19		+9.8 + 30.6 + 1.6 + 40.4 + 10.6 + 10.6	8.19787 + 12 + 75 $8.19799 + 84$
	20	- 4 46 +0.91 +0.24	+ 710 +30.0 -20	8.19895 + 96 + 95
	21	- 3.31 +1.15 +0.26	+ 00 6 +20.0 -28	8.20086 +191 +103
	22	- I.00 +1.41 +0.21	+124.4 $+24.8$ $-5.6$	8 20280 +294 +108
	23	= 0.28 +1.02	+142.6 +19.2 -7.0	8 20782 +106
	24	+ 1.41 +1.09 -0.16	+155.8 -7.7	8 21200 + 07
	25	+ 2.04 +1.53 -0.43	T 4.5	8 21800 +005 + 72
	26	+ 4.04 +1.10 -0.67	+157.7 $-2.6$ $-7.1$ $-5.5$	8.22573 +678 + 35
Okt.	8	14.37 <sup>8</sup>	- 74 <sup>"</sup> 3",	8.22166
	9	-T2 22 +0.23	- 88 8 -14·5 +0.7	8.21547 -619 + 84
	10	-12.06 +o.oi	$-93.6^{-4.8} + 9.5$	8.21012 -535 + 98
	II	-10.78 <sup>+1.28</sup> -0.12	$-88.0^{+4.7} + 8.2$	8.20575 -437 +101
	12	- 0 62 +1.10 -0 10	$-76.0^{+12.9} +6.8$	8.20239 + 97
	13	- 8.65 +0.97 -0.16	- r6 2 +19.7 +r 1	8.20000 + 89
	14	- 784 -0.01	-31.5 + 24.8 + 3.7 + 28.5	$8.19850 \begin{array}{r} -150 \\ -68 \end{array} + 82$
	15	- 7.13 +0.71 0.00	- 3.0 <sup>+26.5</sup> +2.0	8.19782 + 74
	16	- 6.42 +0.11	+ 27.5 +30.5 +0.5	8.19788 + 6 + 69

m <sub>a</sub> .		11-7-2	Oh Welt-Zeit	
Tag	5	$\alpha_{\mathbb{C}} - \alpha_k$	$\delta_{\mathbb{C}} - \delta_k$	$\log \sin  p_k$
Okt.	16 17 18 19 20 21 22 23 24 25	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 8.19788 \\ 8.19863 \\ + 75 \\ 8.20005 \\ + 142 \\ + 68 \\ + 210 \\ 8.20215 \\ + 284 \\ + 74 \\ 8.20499 \\ + 362 \\ 8.20861 \\ + 441 \\ + 78 \\ 8.21302 \\ + 441 \\ + 78 \\ 8.21821 \\ + 586 \\ 8.22407 \\ + 631 \\ + 10 \\ \end{array}$
Nov.	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8.21060 8.20577 -362 8.20215 -239 +117 -122 8.19854 -17 8.19857 -17 8.20060 8.20271 8.20533 8.20533 8.20533 8.2182 8.2182 8.2184 -38 8.21864 -38 8.21884 -38 8.21984 -4420 8.22920 8.23410 8.23881 -483 -19 8.23881 -490 -19 8.23881
Dez.	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Verfinsterungen: E. Eintritte, A. Austritte (in Welt-Zeit)

Т	RA	BANT I		TRA	T	RA	BANT I		TRABANT I					
Jan.	0	h m II 2I.Q	Α,	März 18	8 28.5	Α.	Aug.	I	h m 12 59.0	E.	Okt.	18	9 57.8	E.
oun.	2	5 50.8	A.	20	2 57.2	A.	Aug.	3	7 27.6	E.	OAU.	20	4 26.7	E.
	4	0 19.6	A.	21	21 25.9	A.		5	1 56.1	E.		21	22 55.3	E.
	5	18 48.5	A.	23	15 54.6	A.		6	20 24.7	E.		23	17 24.1	E.
	7	13 17.3	A.	25	10 23.3	A.		8	14 53.2	E.		25	11 52.8	E.
	9	7 46.2	A.					10	9 21.8	E.		27	6 21.6	E.
	II	2 15.0	A.		h m			12	3 50.3	E.		29	0 50.3	E.
	12	20 43.9	A.	Mai 28	1 22.8	E.		13	22 18.9	E.		30	19 19.1	E.
	14	15 12.7	A.	29	19 51.3	E.		15	16 47.4	E.	Nov.	I	13 47.8	E.
	16	9 41.6	A.	31	14 19.9	E.		17	11 16.0	E.		3	8 16.7	E.
	18	4 10.4	A.	Juni 2	8 48.5	E.		19	5 44.6	E.		3	10 27.1	A.
	19	22 39.2	A.	4	3 17.0	E.		21	0 13.2	E.		5	4 55.9	A.
	21	17 8.0	A.	5	21 45.6	E.		22	18 41.7	E.		6	23 24.7	A.
	23	11 36.9	A.	7	16 14.2	E.		24	13 10.3	E.		8	17 53.4	A.
	25	6 5.7	A.	9	IO 42.7	E.		26	7 38.8	E.		10	12 22.3	A.
	27	0 34.5	Α.	II	5 11.3	E.		28	2 7.4	E.		12	6 51.0	Α.
	28	19 3.3	Α.	12	23 39.8	E.		29	20 36.0	E.		14	I 19.9	Α.
D 1	30	13 32.1	Α.	14	18 8.4	E.		31	15 4.6	E.		15	19 48.7	A.
Febr.	Ι	8 0.9	Α.	16	12 36.9	E.	Sept.		9 33.1	E.		17	14 17.5	A.
	3	2 29.7	A.	18	7 5.5	E.		4	4 1.8	E.		19	8 46.3	A.
	4	20 58.5	A.	20	1 34.0	E.		5	22 30.3	E.		21	3 15.2	A.
	8	15 27.3	A.	21	20 2.6	E.		7	16 58.9	E.	1	22	21 44.0	A.
		9 56.1	A.	23	14 31.1	E. E.		9	11 27.5	E.		24	16 12.9	A.
	II	4 24.9	A. A.	25	8 59.7	E.		II	5 56.1	Е. Е.		26	10 41.7	A. A.
	i	22 53.7	A.	27	3 28.2	E.		13	0 24.7	E.		28	5 10.5	A.
	13	17 22.5 11 51.3	A.		21 56.8	E.		14	000	E.	Dez.	29 I	23 39.3 18 8.2	A.
	17	6 20.0	A.	Juli 2	16 25.3	E.		18	7 50.6	E.	Dez.			A.
	19	0 48.8	A.	4	5 22.4	E.		20	2 19.1	E.		3	7 6.0	A.
	20	19 17.6	A.	5	23 51.0	E.		21	20 47.8	E.		5 7	1 34.8	A.
	22	13 46.3	Α.	7	18 19.5	E.		23	15 16.4	E.		8	20 3.8	A.
	24	8 15.1	Α.	9	12 48.1	E.		25	9 45.1	E.		10	14 32.6	A.
	26	2 43.8	A.	II	7 16.5	E.		27	4 13.7	E.		12	9 1.5	A.
	27	21 12.6	A.	13	1 45.1	E.		28	22 42.4	E.		14	3 30.4	A.
	29	15 41.3	A.	14	20 13.6	E.		30	17 11.0	E.		15	21 59.3	A.
März	2	10 10.0	A.	16	14 42.2	E.	Okt.	2	11 39.7	E.		17	16 28.2	A.
	4	4 38.8	A.	18	9 10.7	E.		4	6 8.3	E.		19	10 57.1	A.
	5	23 7.5	A.	20	3 39.3	E.		6	0 37.1	E.		21	5 26.0	A.
	7	17 36.2	A.	21	22 7.8	E.		7	19 5.7	E.	7.1	22	23 54.9	A.
	9	12 5.0	A.	23	16 36.4	E.		9	13 34.4	E.	-1	24	18 23.8	A.
	II	6 33.7	A.	25	11 4.9	E.		11	8 3.0	E.		26	12 52.7	A.
	13	I 2.4	A.	27	5 33.5	E.		13	2 31.8	E.		28	7 21.6	A.
	14	19 31.1	Α.	29	0 2.0	E.		14	21 0.4	E.		30	1 50.5	A.
	16	13 59.8	Α.	30	18 30.5	E.	I	16	15 29.2	E.		31	20 19.4	A.

Verfinsterungen:	E.	Eintritte,	A.	Austritte	(in	Welt-Zeit)
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T	'RA	BANT I	I	r	RA	BANT	II	r	${}^{1}$ R $A$	BA	NT I	II	T	RA	BAN	T I	II
Jan.	0	6 29.9	A.	Juli	27	21 16.7	E.	Dez.	10	h	т 54.4	A.	Juli	16	18h	8.3	A.
	3	17 11.1	E.		27	23 49.9	A.	1002.	13		12.8	A.		23	20	5.6	E.
	3	19 49.6	Α.		31	10 34.1	E.		17		31.1	A.		23	22	8.5	Α.
	7	9 8.6	A.		31	13 7.3	A.		20	_	49.6	A.		31	0	6.8	Ε.
	10	22 28.4	Α.	Aug.	3	23 51.4	E.		24	6	8.0	A.		31	2	9.2	A.
	14	II 47.4	Α.		4	2 24.5	A.		27		26.7	A.	Aug.	7	4	7.4	Ε.
	18	I 7.2	Α.		7	13 8.8	E.		31	-	45.2	A.		7	6	9.1	A.
	21	14 26.2	Α.		7	15 41.8	A.			<u> </u>	15			14	8	7.9	E.
	25	3 46.1	Α.		II	2 26.0	E.							14	10	9.0	A.
	28	17 5.1	Α.		II	4 59.0	A.		$\Gamma \mathbf{R} A$	ABA	NT	III		21	12	8.4	E.
Febr.		6 24.9	Α.		14	15 43.3	E.	_		h	m	-		21	14	9.0	A.
	4	19 43.9	A.		14	18 16.2	A.	Jan.	5	3	16.8	E.		28	16	9.1	E.
	8	9 3.8	A.		18	5 0.5	E.		5	5	47·I	A.		28	18	9.1	A.
	II	22 22.7	Α.		18	7 33.4	A.		12		20.0	Ε.	Sept.	4		10.5	E.
	15	11 42.6	A.		21	18 17.7	E.		12	1	49.2	A.		4		10.0	A.
	19	1 1.5	A.		21	20 50.6	A.		19		22.4	Ε.		12		11.5	E.
	22	14 21.4	A.		25	7 34.9	E.		19	_	50.5	A.		12		10.5	A.
	26	3 40.2	Α.		25	10 7.7	A.		26		24.9	Ε.		19		12.9	E.
März	29	17 0.0	A. A.		28	20 52.1	E.	E.b.	26		51.8	A.		19		11.5	A. E.
Maiz	4	6 18.9		Camb	28	23 24.9	A. E.	Febr.	2	_	27.I	E.		26		13.6	A.
	7	8 57.4	A.	Sept.		10 9.3	E.		2		52.8	A. E.	Okt.	26	10		E.
	14	22 17.0	A.		4 8	23 26.5	E.		9	-	29.4	A.	OKt.	3	12 1		A.
	18	11 35.8	A.		12	12 43.7	E.		10		54.0	E.		3	16		E.
	22	0 55.3	A.		15	15 18.1	E.		17		32.1	A.		10	18	-	A.
	25	14 14.0			19	4 35.3	E.		17 24		55.6	E.		17	20 1		E.
	-5				22	17 52.5	E.		24		34.5 56.9	A.		17	22 ]	0	A.
Mai	28	h m	E.		26	7 9.7	E.	März	2		58.5	A.		25		.8.r	E.
Juni	I	0 32.9	Е.		29	20 27.0	E.		9		59.4	A.	Nov.	-3		19.6	E.
	4	13 50.9	E.	Okt.	3	9 44.3	E.		16	22	0.2	A.		I		16.4	A.
	8	3 9.1	E.		6	23 1.6	E.		24	2	0.8	A.		8	10 1		A.
	II	16 27.0	Е.		10	12 19.0	E.							15	14		A.
	15	5 45.1	E.		14	1 36.3	E.							22	16 2		E.
	18	19 2.9	E.		17	14 53.7	E.	Mai	27	II		E.		22	18 2	-	A.
	22	8 20.9	E.		21	4 11.2	E.		27	14	6.6	A.		29	20 2		E.
	25	21 38.6	E.		24	17 28.7	E.	Juni	3		58.6	E.		29	22 2	-	A.
	29	10 56.4	E.		28	6 46.3	E.		3	18	7.0	A.	Dez.	7	0 2	7.0	E.
Juli	3	0 14.0	E.		31	20 3.9	E.		10	20	0.2	E.		7	2 2	3.4	A.
	6	13 31.7	E.	Nov.	4	11 54.3	A.		10	22	7.8	A.		14	4 2		E.
	10	2 49.3	E.		8	I 12.0	A.		18	0	1.0	E.		14	6 2		A.
	13	16 6.9	E.		II	14 29.8	A.		18	2	7.8	A.		21	8 3		E.
	13	18 40.4	Α.		15	3 47.6	A.		25	4	1.8	E.		21	10 2		A.
	17	5 24.4	E.		18	17 5.6	A.		25	6	7.7	Α.		28	12 3		E.
	17	7 57.9	A.		22	6 23.6	A.	Juli	2	8	2.4	E.		28	14 3		A.
	20	18 41.9	E.		25	19 41.6	A.		2	10	7.5	A.					
	20	21 15.3	A.		29	8 59.7	A.		9	12	3.2	E.			D A BT	т т	C7
	24	7 59.3	E.	Dez.	2	22 17.9	A.		9	14	7.6	Α.	TRABANT IV wird nicht verfinstert.				
	24	10 32.7	A.		6	11 36.1	A.		16	16	4.6	E.	wird	nic	ht ve	rfinst	ert.

Welt-		α	β	$p_{\alpha}$	a	b	U'	B'	P'
194	10								
Jan.	-6	18.78	16.94	+0.04	42.31	- 9.93	218.816	-15.828	+21.529
	+2	18.52	16.70	0.05	41.72	9.83	219.089	15.933	21.442
	10	18.26	16.46	0.05	41.12	9.75	219.362	16.038	21.355
	18	18.00	16.23	0.05	40.53	9.70	219.636	16.142	21.267
	26	17.74	16.00	0.05	39.96	9.68	219.910	16.246	21.178
Febr.	3	17.50	15.79	+0.04	39.42	- 9.69	220.184	-16.350	+21.089
	II	17.28	15.59	0.04	38.91	9.73	220.459	16.453	20.999
	19	17.07	15.41	0.03	38.45	9.79	220.734	16.556	20.909
	27	16.88	15.25	0.03	38.03	9.88	221.010	16.659	20.818
März	6	16.72	15.11	0.02	37.66	10.00	221.286	16.762	20.726
	14	16.58	14.99	+0.02	37.34	-10.13	221.563	-16.864	+20.634
	22	16.46	14.89	0.01	37.08	10.28	221.840	16.966	20.541
U	30	16.37	14.81	+0.01	36.87	10.44	222.118	17.067	20.448
April	7	16.30	14.75	0.00	36.72	10.62	222.396	17.168	20.354
•	15	16.26	14.72	0.00	36.62	10.81	222.674	17.269	20.259
	23	16.24	14.71	0.00	36.58	-11.02	222.953	-17.370	+20.164
Mai	I	16.25	14.73	0.00	36.60	11.24	223.232	17.470	20.068
	9	16.28	14.76	0.00	36.67	11.47	223.512	17.570	19.972
	17	16.34	14.81	-0.01	36.80	11.71	223.792	17.669	19.875
	25	16.42	14.89	0.01	36.98	11.96	224.072	17.768	19.777
Juni	2	16.52	14.99	-0.02	37.21	-12.21	224.353	-17.867	+19.679
	10	16.65	15.11	0.02	37.50	12.47	224.634	17.965	19.580
	18	16.80	15.25	0.03	37.84	12.73	224.916	18.063	19.481
	26	16.97	15.41	0.03	38.22	13.00	225.198	18.161	19.381
Juli	4	17.16	15.59	0.04	38.65	13.27	225.481	18.258	19.280
	12	17.37	15.79	-0.04	39.13	-13.54	225.764	-18.355	+19.179
	20	17.60	16.00	0.05	39.64	13.80	226.048	18.452	19.078
	28	17.84	16.22	0.05	40.19	14.06	226.332	18.548	18.976
Aug.	5	18.10	16.46	0.05	40.77	14.31	226.616	18.644	18.874
	13	18.36	16.70	0.05	41.36	14.55	226.901	18.739	18.771
	21	18.63	16.94	-0.05	41.96	-14.77	227.186	-18.834	+18.667
	29	18.90	17.18	0.05	42.56	14.97	227.472	18.929	18.563
Sept.	6	19.16	17.42	0.04	43.15	15.14	227.758	19.023	18.458
	14	19.41	17.64	0.04	43.71	15.27	228.045	19.117	18.352
	22	19.64	17.85	0.03	44.23	15.37	228.332	19.210	18.246
	30	19.84	18.03	-0.02	44.69	-15.43	228.619	-19.303	+18.139
Okt.	8	20.01	18.18	0.01	45.07	15.45	228.907	19.395	18.032
	16	20.14	18.30	-0.01	45.37	15.43	229.195	19.487	17.924
	24	20.23	18.38	0.00	45.57	15.36	229.484	19.579	17.815
Nov.	1	20.27	18.41	0.00	45.67	15.25	229.773	19.670	17.706
	9	20.26	18.40	0.00	45.65	-15.10	230.063	-19.761	+17.596
	17	20.21	18.34	0.00	45.52	14.92	230.353	19.852	17.486
	25	20.11	18.24	+0.01	45.29	14.72	230.644	19.942	17.375
Dez.	3	19.96	18.11	0.02	44.96	14.50	230.935	20.032	17.264
	11	19.77	17.94	0.02	44.55	14.28	231.227	20.121	17.152
	19	19.56	17.74	0.03	44.06	14.06	231.519	20.210	17.040
	27	19.32	17.52	0.04	43.52	13.86	231.811	20.298	16.927
	35	19.06	17.29	+0.05	42.94	-13.67	232.104	-20.385	+16.814

Juli

272.690

-20.079

# Saturn und Saturnsring 1940

O <sup>h</sup> Welt-2		U	В	P	$\log \frac{(\Delta)}{\Delta}$	Welt	h -Zeit	U	В	P	$\log \frac{(\Delta)}{\Delta}$
194	10					194	<b>1</b> 0				
Jan.	-2	255.253	-13.596	+1.724	0.02847	Juli	4	272.690	-20.079	-o.324	9.99221
	+2	255.265	13.622	1.722	0.02538		8	273.028	20.165	0.365	9.99482
	6	255.306	13.660	1.717	0.02225		12	273.345	20.243	0.403	9.99752
	10	255.375	13.709	1.710	0.01911		16	273.641	20.314	0.439	0.00031
	14	255.471	13.770	1.699	0.01597		20	273.915	20.377	0.472	0.00319
	18	255.595	-13.842	+1.685	0.01284		24	274.165	-20.433	-0.503	0.00613
	22	255.745	13.924	1.668	0.00975		28	274.392	20.481	0.530	0.00914
	26	255.922	14.017	1.648	0.00670	Aug.	1	274.594	20.521	0.554	0.01221
	30	256.124	14.119	1.625	0.00370		5	274.769	20.554	0.575	0.01531
Febr.	3	256.351	14.231	1.599	0.00077		9	274.917	20.579	0.593	0.01845
	7	256.602	-14.352	+1.571	9.99792		13	275.038	-20.596	-0.607	0.02160
	II	256.875	14.480	1.540	9.99516		17	275.131	20.605	0.618	0.02475
	15	257.170	14.616	1.507	9.99250		21	275.195	20.606	0.626	0.02789
	19	257.486	14.759	1.471	9.98995		25	275.230	20.599	0.630	0.03101
	23	257.822	14.909	1.433	9.98751		29	275.236	20.585	0.631	0.03408
	27	258.177	-15.064	+1.392	9.98519	Sept.	2	275.212	-20.563	-0.628	0.03710
März	2	258.549	15.224	1.349	9.98301		6	275.160	20.533	0.622	0.04005
	6	258.938	15.390	1.304	9.98096		10	275.079	20.496	0.612	0.04290
	10	259.343	15.560	1.257	9.97905		14	274.970	20.451	0.599	0.04565
	14	259.762	15.733	1.209	9.97729		18	274.834	20.399	0.583	0.04828
	18	260.194	-15.909	+1.159	9.97568		22	274.672	-20.341	-o.563	0.05076
	22	260.638	16.088	1.108	9.97422		26	274.485	20.277	0.540	0.05309
	26	261.093	16.268	1.055	9.97292		30	274.273	20.206	0.515	0.05525
	30	261.558	16.450	1.001	9.97177	Okt.	4	274.039	20.130	0.487	0.05722
April	3	262.032	16.632	0.946	9.97079		8	273.785	20.050	0.456	0.05899
	7	262.513	-16.815	+o.889	9.96997		12	273.513	-19.966	-o.423	0.06054
	11	263.001	16.997	0.832	9.96932		16	273.226	19.877	0.388	0.06186
	15	263.494	17.179	0.774	9.96883		20	272.926	19.785	0.352	0.06294
	19	263.991	17.360	0.716	9.96851		24	272.614	19.691	0.314	0.06377
	23	264.491	17.539	0.657	9.96835		28	272.294	19.596	0.276	0.06435
	27	264.993	-17.716	+0.598	9.96836	Nov.	Ι	271.969	-19.500	-0.237	0.06467
Mai	I	265.495	17.891	0.538	9.96853		5	271.642	19.405	0.198	0.06472
	5	265.997	18.063	0.478	9.96887		9	271.316	19.310	0.158	0.06451
	9	266.497	18.231	0.419	9.96937		13	270.993	19.217	0.119	0.06404
	13	266.995	18.396	0.360	9.97003		17	270.677	19.128	0.081	0.06330
	17	267.489	-18.557	+0.301	9.97086		21	270.370	-19.043	-0.044	0.06231
	21	267.978	18.714	0.243	9.97184		25	270.076	18.962	-0.009	0.06108
	25	268.460	18.866	0.185	9.97298		29	269.796	18.886	+0.024	0.05960
	29	268.935	19.013	0.128	9.97427	Dez.	3	269.533	18.817	0.056	0.05790
Juni	2	269.402	19.155	0.072	9.97572		7	269.290	18.755	0.086	0.05599
	6	269.859	-19.292	+0.017	9.97731		II	269.068	-18.700	+0.112	0.05387
	10	270.305	19.423	-0.037	9.97904		15	268.870	18.654	0.135	0.05157
	14	270.739	19.549	0.089	9.98092		19	268.696	18.616	0.156	0.04911
	18	271.160	19.668	0.140	9.98293		23	268.548	18.587	0.174	0.04650
	22	271.567	19.781	0.189	9.98507		27	268.428	18.568	0.188	0.04375
	26	271.958	19.887	0.236	9.98733		31	268.336	18.558	0.199	0.04089
	30	272.333	19.986	0.281	9.98971		35	268.273	-18.558	+0.207	0.03793
Inli	4	000 600	20 050	0.004	0.00000						

9.99221

-o.324

0 Welt-		L	M	L	M	L	L	M	L	М
19.	40	MIM	AS	ENCEL	ADUS	TETHYS	DIO	NE	RH	EA
Jan.	<b>-</b> 6	194.256	29.45	83.869	120.8	295.809	204.273	37.9	128.998	322.9
Jan.	+10	185.993	29.45 5.17	327.563		106.982	148.832	341.1	324.038	158.1
	26	177.729	340.89	211.256	359.I 237.4	278.155		284.3	159.077	353.2
Febr.	II	169.466	316.61	94.949	115.7	89.329	93.391 37.950	227.5	354.117	188.3
1.001.	27	161.203	292.33	338.643	354.0	260.502	342.508	170.7	189.156	23.4
	21	101.203	292.33	330.043	354.0	200.502	342.500	170.7	109.150	23.4
Juli	4	95.108	98.13	128.200	100.3	189.888	258.977	76.6	309.472	144.4
	20	86.847	73.86	11.898	338.6	1.061	203.536	19.8	144.512	339.5
Aug.	5	78.587	49.59	255.596	216.9	172.235	148.094	323.0	339.551	174.6
	21	70.327	25.31	139.295	95.2	343.408	92.652	266.2	174.591	9.7
Sept.	6	62.067	1.03	22.995	333.5	154.581	37.211	209.4	9.630	204.9
	22	53.807	336.76	266.696	211.8	325.754	341.769	152.6	204.670	40.0
Okt.	8	45.548	312.49	150.398	90.1	136.927	286.327	95.8	39.709	235.1
	24	37.289	288.22	34.101	328.4	308.100	230.885	39.0	234.749	70.2
Nov.	9	29.031	263.94	277.805	206.7	119.274	175.443	342.2	69.788	265.3
	25	20.773	239.67	161.511	85.0	290.447	120.001	285.4	264.828	100.4
Dez.	11	12.515	215.40	45.218	323-3	101.620	64.559	228.6	99.867	295.5
_ 02.	27	4.257	191.13	288.926	201.6	272.793	9.117	171.8	294.907	130.7
	43	356.000	166.86	172.635	79.9	83.966	313.674	115.0	129.946	325.8
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O <sup>h</sup> Welt-Z	eit	L	M	L	M	e	log a	L	М
104		TIT	'AN		НҮР	ERION		JAP	ETUS
Jan.	- 6	60 707	0	0	-(-(-			0	0
Jan.	+10	69.535	250.45	165.933	263.62	0.09725	2.32965	44.983	91.58
	26	70.768	251.66	77.927	176.51	0.09791	2.32975	117.592	164.19
Febr.	11	72.001	252.87	349.802	89.27	0.09865	2.32989	190.202	236.79
rebi.		73.234	254.08	261.531	1.87	0.09946	2.33005	262.811	309.39
	27	74.466	255.29	173.090	274.29	0.10034	2.33024	335.420	21.99
Juli	4	84.328	264.96	178.005	085 50	0.70704	2 22100	rob 206	242.81
oun	20	85.560	266.17	87.717	285.59 196.05	0.10794	2.33199	196.296 268.905	315.41
Aug.		86.793	267.38				2.33216		28.01
rug.	5 21	88.026	268.59	357.285	106.35	0.10945	2.33230	341.515	100.61
Sept.	6		269.80	266.736 176.102	16.52	0.11009	2.33242	54.124	
ьсри.	0	89.259	209.00	170.102	286.59	0.11063	2.33250	126.733	173.22
	22	90.491	271.01	85.418	196.61	0.11108	2.33255	199-343	245.82
Okt.	8	91.724	272.22	354-717	106.62	0.11143	2.33256	271.952	318.42
	24	92.957	273.43	264.034	16.64	0.11167	2.33254	344.562	31.02
Nov.	9	94.189	274.63	173.404	286.70	0.11181	2.33248	57.171	103.62
	25	95.422	275.84	82.861	196.85	0.11186	2.33238	129.781	176.23
Dog		06.6	_				, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	_
Dez.	II	96.655	277.05	352.435	107.13	0.11183	2.33224	202.390	248.83
	27	97.887	278.26	262.155	17.56	0.11173	2.33207	274.999	321.43
	43	99.120	279.47	172.045	288.16	0.11155	2.33189	347.609	34.03

# Bewegung der mittleren Länge L und der mittleren Anomalie M

Zeit	Mir	mas	Encela	ıdus	Tethys	Dio	ne	Rhe	ea	Tit	an	Jap	etus
2010	L	M	L	М	L	L	M	L	M	L	M	L	M
d I	21.9837	20,983	262.7312	262.39	190.6983	131.5349	131.45	79.6900	79.69	22.5771	22.576	4.5381	4.538
2	43.9675	41.966	165.4625	164.79	21.3966	263.0698	262.90	159.3799	159.39	45.1541	45.151	9.0762	9.075
3	65.9512	62.948	68.1937	67.18	212.0949	34.6046	34.35	239.0699	239.08	67.7312	67.727	13.6143	13.612
4	87.9350	83.931	330.9250	329.58	42.7932	166.1395	165.80	318.7599	318.78	90.3082	90.302	18.1524	18.150
5	109.9187	104.914	233.6562	231.97	233.4916	297.6744	297.25	38.4498	38.47	112.8853	112.878	22,6905	22.688
6	131.9025	125.897	136.3875	134.36 36.76	64.1899	69.2093	68.70	118.1398	118.16	135.4624	135.454	27.2286	27.225 31.762
8	175.8700	167.862	301.8500	299.15	85.5865	332.2790	331.60	277.5197	277.55	180.6165	180.605	36.3048	36.300
9	197.8537	188.845	204.5812	201.54	276.2848	103.8139	103.05	357.2097	357.24	203.1936	203.181	40.8428	40.838
10	219.8375	209.828	107.3125	103.94	106.9831	235.3488	234.50	76.8997	76.94	225.7706	225.756	45.3809	45.375
11	241.8212	230.811	10.0437	6.33	297.6814	6.8836	5.95	156.5897	156.63	248.3477	248.332	49.9190	49.912
12	263.8050	251.794	272.7750	268.72	128.3797	138.4185	137.40	236.2796	236.32	270.9247	270.908	54.4571	54.450
13	285.7887	272.777	175.5062	171.12	319.0781	269.9534	268.85	315.9696	316.02	293.5018	293.483	58.9952	58.988
14	3°7.7725 329.7562	293.759 314.742	78.2375	73.51 335.91	149.7764 34°.4747	41.4883	40.30	35.6596 115.3495	35.71 115.41	316.0789	316.059 338.634	63.5333	63.525
16	351.7400	335.725	243.7000	238.30	171.1730	304.5580	303.20	195.0395	195.10	361.2330	361.210	72.6095	72.600
	33 71	333 7 3	.,,		, ,,	0 1 33	0 3	75 575	,,,	00		, ,,	<b>'</b>
d			0		0				0				
0.1	38.1984	38.098	26.2731	26.24	19.0698	13.1535	13.14	7.9690	7.97	2.2577	2.258	0.4538	0.454
0.2	76.3967	76.197	52.5462	52.48	38.1397	26.3070	26.29	15.9380	15.94	4.5154	4.515	0.9076	0.908
0.3	114.5951	114.295	78.8194	78.72	57.2095	39.4605	39.44	23.9070	23.91	6.7731	6.773	1.3614	1.361
0.4	152.7935	152.393	105.0925	104.96	76.2793 95.3492	65.7674	52.58 65.72	39.8450	39.85	9.0308	9.030	2.2690	2,269
0.6	229.1902	228.590	157.6387	157.44	114.4190	78.9209	78.87	47.8140	47.81	13.5462	13.545	2.7229	2.722
0.7	267.3886	266,688	183.9119	183.68	133.4888	92.0744	92.02	55.7830	55.78	15.8039	15.803	3.1767	3.176
0.8	305.5870	304.786	210.1850	209.92	152.5586	105.2279	105.16	63.7520	63.75	18.0616	18.060	3.6305	3.630
0.9	343.7854	342.885	236.4581	236.15	171.6285	118.3814	118.30	71.7210	71.72	20.3194	20.318	4.0843	4.084
1.0	381.9837	380.983	262.7312	262.39	190.6983	131.5349	131.45	79.6900	79.69	22.5771	22.576	4.5381	4.538
d 0.01	3.8198	3.810	2,6273	2.62	1.9070	1.3153	1.31	0.7969	0.80	0.2258	0.226	0.0454	0.015
0.02	7.6397	7.620	5.2546	5.25	3.8140	2.6307	2.63	1.5938	1.59	0.4515	0.452	0,0908	100.0
0.03	11.4595	11.429	7.8819	7.87	5.7209	3.9460	3.94	2.3907	2.39	0.6773	0.677	0.1361	0.136
0.04	15.2793	15.239	10.5092	10.50	7.6279	5.2614	5.26	3.1876	3.19	0.9031	0.903	0.1815	0.182
0.05	19.0992	19.049	13.1366	13.12	9-5349	6.5767	6.57	3.9845	3.98	1.1289	1.129	0.2269	0.227
0.06	22.9190	22.859	15.7639	15.74	11.4419	7.8921	7.89	4.7814 5.5783	4.78 5.58	1.3546	1.355	0.2723	0.272
0.07	26.7389	26,669 30.479	21.0185	18.37	15.2559	10.5228	10.52	6.3752	6.38	1.8062	1.806	0.31//	0.318
0.09	34.3785	34.288	23.6458	23.62	17.1628	11.8381	11.83	7.1721	7.17	2.0319	2.032	0.4084	0.408
0.10	38.1984	38.098	26.2731	26.24	19.0698	13.1535	13.14	7.9690	7-97	2.2577	2.258	0.4538	0.454
d		0			.0	0			0			- de	0
0.001	0.3820	0.381	0.2627	0.26	0.1907	0.1315	0.13	0.0797	0.08	0.0226	0.023	0.0045	0.005
0,002	0.7640	0.762	0.5255	0.52	0.3814	0,2631	0.26	0.1594	0.16	0.0452	0.045	0.0091	0.009
0.003	1.1460 1.5279	1.143	0.7882	0.79 1.05	0.5721	0.3946	0.39	0.2391	0.24	0.0677	0.068	0.0136	0.014
0,004	1.52/9	1.905	1.3137	1.31	0.9535	0.6577	0.66	0.3984	0.40	0.1129	0.113	0.0102	0.023
0.006	2,2919	2.286	1.5764	1.57	1,1442	0.7892	0.79	0.4781	0.48	0.1355	0.135	0.0272	0.027
0.007	2.6739	2.667	1.8391	1.84	1.3349	0.9207	0.92	0.5578	0.56	0.1580	0.158	0.0318	0.032
0.008	3.0559	3.048	2.1018	2,10	1.5256	1.0523	1.05	0.6375	0.64	0.1806	0.181	0.0363	0.036
0.009	3.4379	3.429	2.3646	2.36	1.7163	1.1838	1.18	0.7172	0.72	0,2032	0.203	0.0408	0.041
0.010	3.8198	3.810	2,6273	2.62	1.9070	1.3153	1.31	0.7969	0.80	0.2258	0.226	0.0454	0.045

O b				િ		11	Υ	N	J	ω	
Welt-	Zeit	Mimas	Encel.	Tethys	Dione	Rhea	Rhea	Saturnsring			
194	0										
Jan.	<u>_6</u>	121.3	98.5	278.3	301.5	227.8	22.35	127.995	6.734	41.791	
-	-10	105.3	91.8	275.1	300.1	227.4	22.35	127.997	6.733	41.789	
	26	89.3	85.2	272.0	298.8	227.0	22.35	127.999	6.733	41.788	
Febr.	II	73.3	78.5	268.8	297.4	226.6	22.35	128.001	6.733	41.787	
	27	57.3	71.8	265.6	296.1	226.2	22.36	128.002	6.733	41.785	
März	14	41.3	65.1	262.5	294.7	225.8	22.36	128.004	6.733	41.784	
	30	25.3	58.4	259.3	293.3	225.3	22.36	128.006	6.732	41.783	
April	15	9-3	51.7	256.1	292.0	224.9	22.36	128.008	6.732	41.782	
Mai	I	353.3	45.0	253.0	290.6	224.5	22.36	128.010	6.732	41.780	
	17	337.3	38.3	249.8	289.3	224.1	22.36	128.012	6.732	41.779	
Juni	2	321.3	31.6	246.6	287.9	223.7	22.36	128.013	6.732	41.778	
	18	305.3	24.9	243.5	286.5	223.3	22.36	128.015	6.731	41.776	
Juli	4	289.3	18.2	240.3	285.2	222.0	22.36	128.017	6.731	41.775	
	20	273.3	11.6	237.1	283.8	222.5	22.36	128.019	6.731	41.774	
Aug.	5	257.3	4.9	234.0	282.5	222.1	22.36	128.021	6.731	41.773	
	21	241.3	358.2	230.8	281.1	221.7	22.36	128.023	6.731	41.771	
Sept.	6	225.3	351.5	227.6	279.7	221.3	22.36	128.025	6.730	41.770	
	22	209.3	344.8	224.5	278.4	220.9	22.36	128.026	6.730	41.769	
Okt.	8	193.3	338.1	221.3	277.0	220.5	22.36	128.028	6.730	41.767	
	24	177.3	331.4	218.1	275.7	220.I	22.36	128.030	6.730	41.766	
Nov.	9	161.3	324.7	215.0	274.3	219.6	22.36	128.032	6.730	41.765	
	25	145.3	318.0	211.8	272.9	219.2	22.36	128.034	6.729	41.764	
Dez.	II	129.3	311.3	208.6	271.6	218.8	22.36	128.036	6.729	41.762	
	27	113.3	304.6	205.5	270.2	218.4	22.36	128.037	6.729	41.761	
	43	97.3	298.0	202.3	268.9	218.0	22.36	128.039	6.729	41.760	

$\log \frac{1}{1+\gamma}$ ,	in	Einheiten	der	5. Dezimale
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			, 4. C					
u-	- U	Mimas	Encel.	Tethys	Dione	Rhea	u-U	
0° 10 20 30 40	360° 350 340 330 320	-6+ -6+ -5+ -5+ -4+	-7+ -7+ -7+ -6+ -6+	-9+ -9+ -8+ -8+ -7+	-11+ -11+ -10+ -9+	-16+ -16+ -15+ -14+ -12+	180° 170 160 150	180° 190 200 210 220
50 60 70 80 90	310 300 290 280 270	-3+ -3+ -2+ -1+ 0	-5+ -4+ -3+ -1+ 0	-6+ -4+ -3+ -2+	- 8+ - 6+ - 4+ - 2+ 0	-IO+ - 8+ - 6+ - 3+ o	130 120 110 100 90	230 240 250 260 270

Op			TITAN		I	HYPERI	ON	JAPETUS			
Welt	-Zeit	U	В	P	U	В	P	U	В	P	
194	ļ0		0	0		0	0	0	0	0	
Jan.	<del>-6</del>	259.176	-13.642	+1.264	254.178	-13.592	+1.859	335-228	-13.401	-13.169	
	+2	259.175	13.683	1.264	254.179	13.634	1.859	335.238	13.441	13.171	
	10	259.286	13.770	1.252	254.292	13.722	1.846	335.369	13.498	13.188	
	18	259.509	13.901	1.227	254.515	13.856	1.821	335.618	13.571	13.219	
	26	259.839	14.074	1.189	254.846	14.032	1.784	335.982	13.658	13.263	
Febr.	3	260.270	-14.284	+1.139	255.278	-14.247	+1.735	336.454	-13.758	-13.318	
	II	260.797	14.529	1.079	255.805	14.498	1.675	337.026	13.868	13.384	
	19	261.412	14.804	1.008	256.419	14.779	1.605	337.691	13.985	13.459	
	27	262.107	15.104	0.927	257.113	15.086	1.526	338.439	14.107	13.542	
März	6	262.873	15.424	0.838	257.878	15.415	1.438	339.260	14.233	13.630	
	14	263.701	-15.761	+0.742	258.704	-15.760	+1.342	340.144	-14.359	-13.722	
	22	264.581	16.109	0.639	259.583	16.117	1.240	341.081	14.485	13.817	
	30	265.505	16.464	0.531	260.506	16.481	1.133	342.060	14.607	13.912	
April	7	266.465	16.821	0.418	261.464	16.849	1.021	343.073	14.724	14.007	
	15	267.450	17.178	0.302	262.447	17.216	0.905	344.109	14.835	14.099	
	23	268.451	-17.530	+0.184	263.447	-17.578	+0.787	345.157	-14.938	-14.188	
Mai	I	269.459	17.874	+0.064	264.454	17.932	0.667	346.209	15.033	14.273	
	9	270.465	18.207	-0.056	265.460	18.275	0.547	347.255	15.119	14.353	
	17	271.460	18.525	0.174	266.455	18.604	0.428	348.286	15.194	14.428	
	25	272.435	18.826	0.290	267.429	18.915	0.311	349.291	15.259	14.496	
Juni	2	273.381	-19.108	-0.403	268.375	-19.207	+0.197	350.262	-15.314	-14.558	
	10	274.287	19.369	0.512	269.282	19.477	+0.087	351.189	15.358	14.613	
	18	275.145	19.607	0.615	270.141	19.724	-0.017	352.063	15.391	14.661	
	26	275.946	19.820	0.711	270.942	19.945	0.114	352.876	15.415	14.703	
Juli	4	276.680	20.007	0.799	271.676	20.139	0.204	353.618	15.429	14.739	
	12	277-337	-20.166	-0.878	272.335	-20.304	-0.284	354.280	-15.435	-14.768	
	20	277.910	20.296	0.946	272.909	20.440	0.354	354.853	15.433	14.791	
	28	278.389	20.397	1.003	273.390	20.546	0.413	355.331	15.423	14.809	
Aug.	5	278.767	20.467	1.049	273.771	20.620	0.459	355.706	15.406	14.822	
	13	279.037	20.507	1.081	274.044	20.662	0.492	355.972	15.384	14.830	
	21	279.195	-20.516	-1.100	274.204	-20.673	-0.511	356.124	-15.358	-14.834	
	29	279.237	20.494	1.105	274.249	20.652	0.517	356.159	15.328	14.834	
Sept.	6	279.163	20.442	1.096	274.178	20.600	0.508	356.076	15.294	14.829	
	14	278.974	20.362	1.073	273.992	20.518	0.485	355.878	15.258	14.820	
	22	278.676	20.255	1.037	273.697	20.408	0.449	355.571	15.220	14.806	
	30	278.277	-20.124	-0.989	273.302	-20.274	-0.401	355.162	-15.182	-14.789	
Okt.	8	277.789	19.971	0.931	272.818	20.117	0.342	354.664	15.143	14.768	
	16	277.230	19.802	0.864	272.263	19.942	0.275	354.094	15.104	14.742	
	24	276.618	19.622	0.790	271.655	19.756	0.201	353-470	15.068	14.712	
Nov.	I	275.973	19.436	0.713	271.014	19.564	0.123	352.813	15.034	14.680	
	9	275.319	-19.251	-o.635	270.364	-19.373	-0.044	352.148	-15.003	-14.646	
	17	274.680	19.075	0.558	269.730	19.191	+0.033	351.498	14.978	14.612	
	25	274.079	18.913	0.486	269.133	19.024	0.105	350.887	14.959	14.578	
Dez.	3	273.537	18.772	0.421	268.594	18.878	0.170	350.337	14.948	14.546	
	11	273.072	18.659	0.366	268.133	18.761	0.226	349.867	14.946	14.519	
	19	272.700	18.578	0.322	267.764	18.676	0.270	349-493	14.953	14.497	
	27	272.433	18.532	0.290	267.500	18.628	0.302	349.228	14.970	14.481	
	35	272.279	-18.524	-0.271	267.349	-18.618	+-0.320	349.08r	-14.998	-14.474	

0 h	HYPE	RION	0 h	HYPE	RION	0 h	HYPE	RION
Welt-Zeit	$\alpha_{lr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	Welt-Zeit	$\alpha_{lr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	Welt-Zeit	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$
1940 Jan. 0 2 4 6 8	+3.5 + 8.1 + 11.6 + 3.3 + 14.9 - 2.1 + 12.8 - 6.1 + 6.7 - 7.8	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1940 Juli 24 26 28 30 Aug. 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} +49 \\ +6 \\ -44 \\ -38 \\ -29 \\ -67 \\ +3 \\ -64 \\ +30 \end{array} $	1940 Okt. 12 14 16 18	+9.2 - 8.6 $+0.6 - 8.7$ $-8.1 - 6.4$ $-14.5 - 1.4$ $-15.9 + 5.0$	+83" +10" +93 -13 +80 -36 +44 -50 - 6 -47
10 12 14 16 18	- 1.1 -7.5 - 8.6 -5.1 -13.7 -1.0 -14.7 +4.1 -10.6 +8.3	+59 - 6 +53 -20 +33 -30 + 3 -30 -27 -19	3 5 7 9	$\begin{array}{c} +13.2 \\ +15.9 \\ -2.1 \\ +13.8 \\ -5.8 \\ +8.0 \\ -7.8 \\ +0.2 \\ -7.9 \end{array}$	$ \begin{array}{rrrr} -34 & +43 \\ + 9 & +41 \\ +50 & +28 \\ +78 & +9 \\ +87 & -13 \end{array} $	22 24 26 28 30	$\begin{array}{ccccc} -10.9 & +10.0 \\ -0.9 & +10.5 \\ +9.6 & +6.7 \\ +16.3 & +1.2 \\ +17.5 & -3.8 \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
20 22 24 26 28	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{rrrr} -46 & + & 2 \\ -44 & +22 \\ -22 & +30 \\ + & 8 & +28 \\ +36 & +18 \end{array} $	13 15 17 19 21	$\begin{array}{c} -7.7 - 5.7 \\ -13.4 - 1.2 \\ -14.6 + 4.6 \\ -10.0 + 9.2 \\ -0.8 + 9.7 \end{array}$	+74 $-34$ $+40$ $-48$ $-8$ $-44$ $-52$ $-20$ $-72$ $+12$	Nov. 1 3 5 7 9	$\begin{array}{c} +13.7 & -7.4 \\ +6.3 & -8.9 \\ -2.6 & -8.3 \\ -10.9 & -4.8 \\ -15.7 & +0.8 \end{array}$	+63 +25  +88 +2  +90 -21  +69 -42  +27 -50
30 Febr. 1 3 5 7	+ 3.8 -7.7 - 3.9 -6.6 -10.5 -3.6 -14.1 +0.8 -13.3 +5.7	$ \begin{array}{r} +54 & +4 \\ +58 & -12 \\ +46 & -24 \\ +22 & -31 \\ -9 & -28 \end{array} $	23 25 27 29 31	+ 8.9 + 6.2 +15.1 + 1.3 +16.4 - 3.5 +12.9 - 6.8 + 6.1 - 8.4	$ \begin{array}{rrrr} -60 \\ -23 \\ +46 \\ +23 \\ +63 \\ +87 \\ +24 \end{array} $	11 13 15 17	$ \begin{array}{rrrrr} -14.9 & + 7.2 \\ -7.7 & +10.7 \\ + 3.0 & + 9.5 \\ +12.5 & + 4.8 \\ +17.3 & -0.8 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
9 11 13 15	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Sept. 2 4 6 8	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	+89 $-21$ $+68$ $-41$ $+27$ $-51$ $-24$ $-40$ $-64$ $-10$	21 23 25 27 29	$\begin{array}{c} +16.5 & -5.3 \\ +11.2 & -8.1 \\ +3.1 & -8.9 \\ -5.8 & -7.2 \\ -13.0 & -3.0 \end{array}$	+37 $+35$ $+72$ $+16$ $+88$ $-6$ $+82$ $-28$ $+54$ $-44$
19	+ 8.2 + 1.2	+45 +58 +13	12 14 16 18 20	+2.6 + 9.2 $+11.8 + 4.9$ $+16.7 - 0.4$ $+16.3 - 4.9$ $+11.4 - 7.8$	$-74 _{+23} \\ -51 _{+42} \\ -9 _{+47} \\ +38 _{+36} \\ +74 _{+18}$	Dez. 1 3 5 7 9	$ \begin{array}{rrrr} -16.0 & + 3.2 \\ -12.8 & + 8.8 \\ - 4.0 & + 10.6 \\ + 6.6 & + 7.9 \\ + 14.5 & + 2.7 \end{array} $	$^{+10}_{-38}$ $^{-29}_{-67}$ $^{+1}_{-66}$ $^{+31}_{-35}$ $^{+42}$
Juli 4 6 8 10 12	-13.7 +1.2 -12.5 +6.4 - 6.1 +9.2 + 3.1 +8.0 +11.1 +3.9	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	28 30	$\begin{array}{c} +\ 3.6 \ -\ 8.7 \\ -\ 5.1 \ -\ 7.4 \\ -12.5 \ -\ 3.3 \\ -15.8 \ +\ 2.7 \\ -13.1 \ +\ 8.5 \end{array}$	$   \begin{array}{r}     +92 \\     +87 \\     -29 \\     +58 \\     -47 \\     +11 \\     -40 \\     -32   \end{array} $	11 13 15 17	$\begin{array}{c} +17.2 \\ +14.7 \\ -6.3 \\ +8.4 \\ -0.1 \\ -8.4 \\ -5.8 \end{array}$	+70 + 9 $+85 -13$ $+72 -33$
14 16 18 20 22 24	+15.0 -0.8 +14.2 -4.8 + 9.4 -7.1 + 2.3 -7.7 - 5.4 -6.3 -11.7	$ \begin{array}{rrrrr} -4 & +41 \\ +37 & +32 \\ +69 & +14 \\ +83 & -6 \\ +77 & -28 \\ +49 \end{array} $	4 6 8 10	$\begin{array}{c} -4.6 \\ +6.1 \\ +6.1 \\ +8.3 \\ +14.4 \\ +3.2 \\ +17.6 \\ -2.2 \\ +15.4 \\ -6.2 \\ \end{array}$	$ \begin{array}{rrrrr} -72 & + & 1 \\ -71 & +32 \\ -39 & +46 \\ + & 7 & +45 \\ +52 & +31 \\ +83 \end{array} $	21 23 25 27 29 31	$ \begin{array}{c c} -15.2 & +5.2 \\ -10.0 & +9.8 \end{array} $	$^{+39}_{-7}$ $^{-46}_{-7}$ $^{-42}_{-49}$ $^{-19}_{-68}$ $^{+12}_{+35}$ $^{-21}$

0 <sup>h</sup>	JAPE'	TUS	0 <sup>h</sup>	JAPE'	TUS	Ор	JAPETUS		
Welt-Zeit	$\alpha_{tr} - \alpha_{pl}$	$\delta_{lr} - \delta_{pl}$	Welt-Zeit	$\alpha_{lr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	Welt-Zeit	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	
1940 Jan. 0 2 4 6	+35.5 -1.6 +33.9 -2.4 +31.5 -3.2 +28.3 -3.8 +24.5 -4.3	+146" "" +160 +10 +170 + 6 +176 + 2 +178 - 2	1940 Juli 24 26 28 30 Aug. 1	-30.8 +2.6 -28.2 +3.5 -24.7 +4.2 -20.5 +4.7 -15.8 +5.1	-168 <sub>-10</sub> , -178 <sub>-6</sub> , -184 <sub>-1</sub> , -185 <sub>+4</sub> , -181 <sub>+9</sub>	1940 Okt. 12 14 16 18 20	-33.6 +3.5 -30.1 +4.4 -25.7 +5.1 -20.6 +5.8 -14.8 +6.2	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
10 12 14 16 18	+20.2 -4.7 +15.5 -5.1 +10.4 -5.3 + 5.1 -5.3 - 0.2 -5.3	+176 - 6 $+170 - 9$ $+161 - 13$ $+148 - 17$ $+131 - 20$	3 5 7 9	-10.7 +5.5 - 5.2 +5.7 + 0.5 +5.7 + 6.2 +5.6 +11.8 +5.3	$ \begin{array}{r} -172 \\ -159 \\ +17 \\ -142 \\ +22 \\ -120 \\ +25 \\ -95 \\ +28 \end{array} $	22 24 26 28 30	$\begin{array}{ccccc} -8.6 & +6.4 \\ -2.2 & +6.5 \\ +4.3 & +6.4 \\ +10.7 & +6.1 \\ +16.8 & +5.6 \end{array}$	$\begin{array}{c} -182 \\ -163 \\ +23 \\ -140 \\ +28 \\ -112 \\ -81 \\ +32 \end{array}$	
20 22 24 26 28	- 5.5 -5.1 -10.6 -4.9 -15.5 -4.4 -19.9 -3.9 -23.8 -3.4	$ \begin{array}{r} +111 \\ +89 \\ -24 \\ +65 \\ -25 \\ +40 \\ -26 \\ \end{array} $	13 15 17 19 21	+17.1 +4.9 +22.0 +4.4 +26.4 +3.8 +30.2 +3.1 +33.3 +2.3	$ \begin{array}{r} -67_{+30} \\ -37_{+30} \\ -7_{+31} \\ +24_{+31} \\ +55_{+30} \end{array} $	Nov. 1 3 5 7	+22.4 +5.0 +27.4 +4.4 +31.8 +3.5 +35.3 +2.6 +37.9 +1.6	$\begin{array}{r} -49 + 34 \\ -15 + 34 \\ +19 + 34 \\ +53 + 32 \\ +85 + 30 \end{array}$	
30 Febr. 1 3 5 7	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -12 \\ -37 \\ -25 \\ -62 \\ -23 \\ -85 \\ -106 \\ -18 \end{array} $	23 25 27 29 31	+35.6 +1.4 +37.0 +0.6 +37.6 -0.4 +37.2 -1.3 +35.9 -2.0	+ 85 <sub>+28</sub> +113 <sub>+25</sub> +138 <sub>+23</sub> +161 <sub>+19</sub> +180 <sub>+14</sub>	11 13 15 17	+39.5 +0.6 +40.1 -0.3 +39.8 -1.4 +38.4 -2.3 +36.1 -3.2	+115 +28 +143 +24 +167 +19 +186 +15 +201 +10	
9 11 13 15	-32.7 +1.3 -31.4 +2.1 -29.3 +2.8 -26.5 +3.5 -23.0 +4.1	$ \begin{array}{c} -124 \\ -139 \\ -150 \\ -158 \\ -162 \\ + 1 \end{array} $	Sept. 2 4 6 8	+33.9 -2.9 +31.0 -3.7 +27.3 -4.3 +23.0 -4.9 +18.1 -5.3	+194 +10 +204 + 5 +209 0 +209 - 4 +205 - 9	21 23 25 27 29	+32.9 $+28.9$ $-4.6$ $+24.3$ $-5.6$ $+13.5$ $-5.9$	$^{+211}$ + 5 $^{+216}$ 0 $^{+216}$ - 6 $^{+210}$ -10 $^{+200}$ -15	
19 21	-18.9 <sub>+4.6</sub> -14.3	-161 -156 + 5	12 14 16 18 20	+12.8 -5.7 + 7.1 -5.9 + 1.2 -6.0 - 4.8 -5.9 -10.7 -5.7	$ \begin{array}{r} +196 \\ -14 \\ +182 \\ -18 \\ +164 \\ -23 \\ +141 \\ -26 \\ +115 \\ -29 \end{array} $	Dez. 1 3 5 7 9	$\begin{array}{c} +\ 7.6 \\ +\ 1.5 \\ -6.1 \\ -\ 4.6 \\ -6.0 \\ -10.6 \\ -5.7 \\ -16.3 \\ -5.2 \end{array}$	+185 -19 $+166 -23$ $+143 -27$ $+116 -30$ $+86 -31$	
Juli 4 6 8 10 12	-13.8	$ \begin{array}{c} + 80^{"}_{-26} \\ + 54_{-28} \\ + 26_{-29} \\ - 3_{-29} \\ - 32_{-28} \end{array} $	22 24 26 28 30	$ \begin{array}{rrrr} -16.4 & -5.3 \\ -21.7 & -4.7 \\ -26.4 & -4.1 \\ -30.5 & -3.4 \\ -33.9 & -2.5 \end{array} $	$ \begin{array}{r} + 86 \\ + 55 \\ - 33 \\ + 22 \\ - 33 \\ - 11 \\ - 45 \\ - 33 \end{array} $	11 13 15 17 19	-21.5 -4.6 -26.1 -4.0 -30.1 -3.2 -33.3 -2.3 -35.6 -1.3	+ 55 -32 + 23 -33 - 10 -32 - 42 -31 - 73 -29	
14 16 18 20 22 24	-31.4 -1.6 -33.0 -0.7 -33.7 +0.1 -33.6 +1.0 -32.6 +1.8 -30.8	$ \begin{array}{r} -60 \\ -87 \\ -27 \\ -25 \\ -112 \\ -22 \\ -134 \\ -153 \\ -168 \end{array} $	Okt. 2 4 6 8 10 12	$\begin{array}{r} -36.4 & -1.5 \\ -37.9 & -0.5 \\ -38.4 & +0.6 \\ -37.8 & +1.6 \\ -36.2 & +2.6 \\ -33.6 \end{array}$	- 78 -30 -108 -27 -135 -24 -159 -19 -178 -15	21 23 25 27 29 31	$\begin{array}{c} -36.9 & -0.4 \\ -37.3 & +0.6 \\ -36.7 & +1.6 \\ -35.1 & +2.6 \\ -32.5 & +3.4 \\ -29.1 \end{array}$	-102 -26 -128 -22 -150 -18 -168 -14 -182 - 8 -190	

# Östliche Elongationen (in Welt-Zeit)

# MIMAS

		h	1	h	ı	h	1	h	1	
Jan.	0	2.5	Febr. 14	8.4	Aug. 8	15.1	Sept. 22	20.7	Nov. 7	2.2
	I	I.I	15	7.0	9	13.7	23	19.3	8	0.8
	I	23.7	16	5.6	10	12.4	24	17.9	8	23.4
	2	22.3	17	4.2	11	0.11	25	16.5	9	22.0
	3	20.9	18	2.9	12	9.6	26	15.1	10	20.6
	4	19.6	19	1.5	13	8.2	27	13.8	II	19.2
	5	18.2	20	0.1	14	6.9	28	12.4	12	17.8
	6	16.8	20	22.7	15	5.5	29	11.0	13	16.4
	7	15.4			16	4.1	30	9.6	14	15.1
	8	14.1			17	2.7	Okt. 1	8.2	15	13.7
	9	12.7		h	18	1.3	2	6.8	16	12.3
]	0	11.3	Juli 4	18.2	19	0.0	3	5.4	17	10.9
3	I	9.9	5	16.8	19	22.6	4	4.0	18	9.6
	2	8.5	6	15.4	20	21.2	5	2.7	19	8.2
	3	7.2	7	14.0	21	19.8	6	1.3	20	6.8
	4	5.8	8	12.6	22	18.4	6	23.9	21	5.4
	5	4.4	9	11.3	23	17.0	7	22.5	22	4.0
	6	3.0	IO	9.9	24	15.6	8	21.1	23	2.7
	7	1.7	II	8.5	25	14.2	9	19.7	24	1.3
	8	0.3	12	7.1	26	12.9	10	18.3	24	23.9
	8	22.9	13	5.8	27	11.5	II	16.9	25	22.5
	19	21.5	14	4.4	28	10.1	12	15.5	26	21.1
	20	20.2	15	3.0	29	8.7	13	14.2	27	19.7
	15	18.8	16	1.6	30	7.3	14	12.8	28	18.3
	22	17.4	17	0.2	31	5.9	15	11.4	29	16.9
	23	16.0	17	22.9	Sept. 1	4.5	16	10.0	Do- 30	15.6
	24	14.7	18	21.5	2	3.1	17	8.7	Dez. 1	14.2
	25	13.3	19	20.1	3	1.8	18	7.3	2	12.8
	26	11.9	20	18.7	4	0.4	19	5.9	3	11.4
	27	10.5	21	17.3	4	23.0	20	4.5	4	10.0
		9.1	22	15.9	5 6	21.6	21	3.I 1.8	5	8.6
	29	7.8	23	14.6		20.2 18.8	22		6	7.2
	30	6.4	24	13.2 11.8	7 8		23	0.4	7 8	5.8
Febr.	31	5.0 3.6	25 26			17.4 16.0	23	23.0 21.6		4.5
reor.	1 2		27	10.4 9.1	9	14.6	24 25	20.2	9	3.I 1.7
		2.3	28	7.7	II	13.3	26	18.8	11	0.3
	3	23.5	29	6.3	12	11.9	27	17.4	II	22.9
	3	22.1	30	4.9	13	10.5	28	16.0	12	21.5
	5	20.8	31	3.6	14	9.1	29	14.7	13	20.1
	6	19.4	Aug. I	2.2	15	7.8	30		14	18.7
	7	18.0	2	0.8	16	6.4	31	13.3	15	17.3
	8	16.6	2	23.4	17	5.0	Nov. I	10.5	16	16.0
	9	15.3	3	22.1	18	3.6	2	9.1	17	14.6
	10	13.9	4	20.7	19	2.2	3	7.7	18	13.2
	II	12.5	5	19.3	20	0.9	4	6.3	19	11.8
	12	II.I	6	17.9	20	23.5	5	4.9	20	10.5
	13	9.7	7	16.5	21	22.1	6	3.6	21	9.1
	0	,	'	. 3					TT-0- 40	

# Östliche Elongationen (in Welt-Zeit)

		Liongat	(III Welt-Zelt)							
MIM	AS	ENCEL	ADUS	ENCEL.	ADUS	ENC	EL	ADUS	TET:	HYS
T) -	h	1771 1	h	Δ	h	01.4		p	Т	h
Dez. 22	7.7	Febr. 12	0.3	Aug. 24	15.7	Okt.	29	9.7	Jan. 1	20.7
23	6.3	13	9.2	26	0.6	3.7	30	18.6	3	18.0
24	4.9	14	18.1	27	9.4	Nov.	I	3.5	5	15.3
25	3.6	16	3.0	28	18.3		2	12.4	7	12.7
26	2.2	17	11.9	30	3.2		3	21.3	9	10.0
27	0.8	18	20.8	31	12.1		5	6.2	II	7.3
27	23.4	20	5.7	Sept. 1	21.0		6	15.0	13	4.6
28	22.0			3	5.9		7	23.9	15	1.9
29	20.6			4	14.7		9	8.8	16	23.2
30	19.2			5	23.6		IO	17.7	18	20.5
31	17.8		h	7	8.5		12	2.5	20	17.9
32	16.5	Juli 4	22.8	8	17.4		13	11.4	22	15.2
		6	7.7	10	2.2		14	20.3	24	12.5
		7	16.6	11	II.I		16	5.2	26	9.8
		9	1.5	12	20.0		17	14.0	28	7.1
ENCEL	ADUS	10	10.4	14	4.9		18	22.9	30	4.5
	h	11	19.3	15	13.7		20	7.8	Febr. 1	1.8
Jan. o	12.7	13	4.2	16	22.6		21	16.7	2	23.1
I	21.6	14	13.0	18	7.5		23	1.5	4	20.5
3	6.4	15	21.0	19	16.4		24	10.4	6	17.8
4	15.3	17	6.8	21	1.2		25	19.3	8	15.1
6	0,2	18	15.7	22	10.1		27	4.2	10	12.5
7	9.1	20	0.6	23	19.0		28	13.0	12	9.8
8	18.0	21	9.5	25	3.8		29	21.9	14	7.1
10	2.9	22	18.4	26	12.7	Dez.	I	6.8	16	4.5
11	11.8	24	3.3	27	21.6		2	15.7	18	1.8
12	20.7	25	12.1	29	6.5		4	0.5	19	23.1
14	5.6	26	21.0	30	15.3		5	9.4		
15	14.5	28	5.9	Okt. 2	0.2		6	18.3		
16	23.4	29	14.8	3	9.1		8	3.2		
18	8.3	30	23.7	4	18.0		9	12.0		
19	17.1	Aug. 1	8.6	6	2.8		10	20.9	Juli 4	23.I
21	2.0	2	17.4	7	11.7		12	5.8	6	20.4
21	10.9	4	2.3	8	20.6		13	14.7	8	17.8
	19.8		11.2	10	5.5		14	23.6	10	15.1
23	4.7	5 6	20.1	II	14.3		16	8.4	12	12.4
25 26	13.6	8		12	23.2				14	9.7
			5.0		8.1		17	17.3 2.2	16	
27	22.5	9	13.9	14			19		18	7.0
29	7.4	10	22.8	15	17.0 1.8		20	11.1		4.4
30 Eobra -	16.3	12	7.7	17			21	20.0	20	1.7
Febr. 1	1.2	13	16.6	18	10.7		23	4.9	21	23.0
2	10.1	15	1.4	19	19.6		24	13.7	23	20.3
3	19.0	16	10.3	21	4.5		25	22.6	25	17.6
5	3.8	17	19.2	22	13.3		27	7.5	27	14.9
6	12.7	19	4.1	23	22.2		28	16.4	29	12.3
7	21.6	20	13.0	25	7.1		30	1.3	31	9.6
9	6.5	21	21.9	26	16.0		31	10.2	Aug. 2	6.9
_ 10	15.4	23	6.8	28	0.9		32	19.1	4	4.2

Östliche Elongationen (in Welt-Zeit)

Ostificati									(iii ; Wello Ziello)			1	
T	ETE	IYS	T	ETH	IYS	I	OIO	NE	I		NE	RH	EΑ
And	6	р	Morr		h	Ton		h	Olet		h	Fohm we	h
Aug.	6	1.5	Nov.		15.7	Jan.	25	5.7	Okt.	3	4.0	Febr. 10	23.1
	7	22.8		6	13.0		27	23.4		5	21.6	15	11.6
	9	20.1		8	10.3	Dohn	30	17.1		8	15.3	20	0.2
	II	17.4		10	7.6	Febr.		10.8		11	8.9		
	13	14.7		12	4.9	1	5	4.5		14	2.6		
	15	12.1		14	2.2		7	22.3		16	20.2		
	17	9.4		15	23.5		10	16.0		19	13.9	T12	h
	19	6.7		17	20.8	-0	13	9.7		22	7.5	Juli 4	17.4
	21	4.0		19	18.0	1	16	3.4		25	1.2	9	5.9
	23	1.3		21	15.3		18	21.2		27	18.8	13	18.4
	24	22.6		23	12.6				NT	30	12.5	18	6.9
	26	19.9		25	9.9				Nov.		6.1	22	19.4
	28	17.2		27	7.2					4	23.8	27	7.9
Cont	30	14.5	D	29	4.5					7	17.4	31	20.4
Sept.	Ι	11.8	Dez.	1	1.8	T 1.		h		10	II.I	Aug. 5	8.9
	3	9.1		2	23.1	Juli	4	20.3		13	4.7	9	21.3
	5	6.4		4	20.4		7	14.0		15	22.4	14	9.8
	7	3.7		6	17.7		10	7.7		18	16.0	18	22.2
	9	1.0		8	15.0		13	1.4		21	9.7	23	10.6
	10	22.3		10	12.3		15	19.2	1	24	3.3	27	23.0
	12	19.6		12	9.6		18	12.9		26	21.0	Sept. 1	11.5
	14	16.9		14	6.9		21	6.6	D	29	14.6	5	23.9
	16	14.2		16	4.2		24	0.3	Dez.	2	8.3	10	12.3
	18	11.5		18	1.5		26	18.0		5	1.9	15	0.7
	20	8.8		19	22.8	١,	29	11.7		7	19.6	19	13.0
	22	6.1		21	20.1	Aug.	I	5.4		10	13.2	24	1.4
	24	3.4		23	17.4		3	23.1		13	6.9	28	13.7
	26	0.7		25	14.7		6	16.8		16	0.6	Okt. 3	2.1
	27	22.0		27	12.0		9	10.5		18	18.2	7	14.4
Okt.	29	19.3		29	9.3	1	12	4.2		21	11.9	12	2.7
OKt.	1	16.5		31	6.6		14	21.9		24	5.5	16	15.0
	3	13.8		33	3.9		17	15.6		26	23.2	21	3.3
	5	II.I				-	20	9.3		29	16.9	25	15.6
	7	8.4					23	3.0		32	10.0	Nov. 3	3.9
	9	5.7	_				25	20.7	1			Nov. 3	16.2 4.6
	II	3.0	ļ 1		NE	1	28	14.4 8.0				12	16.9
	13	0.3				Sept.	31		F	RHE	A	17	5.2
	14	21.6				sept.	3	1.7	_ ^				_
	16 18	18.9	Ton		h		5 8	19.3	Jan.		6.8	21 26	17.5 5.8
		16.1	Jan.	0	14.4			13.0	Jan.	I			18.1
	20	13.4		3	8.1		II	6.7		5	19.3	Dez. 5	6.5
	22	10.7		6	1.7		14	0.4		10	7.7	1	18.8
	24	8.0		8	19.4		16	18.0		14	20.2	9	
	26 28	5.3		II	13.1		19	11.7		19	8.6	14	7.2
		2.6		14	6.8		22	5.4		23	21.1	18	19.6
	29	23.9		17	0.5		24	23.0	Fohr	28	9.6	23	7.9
Nor	31	21.2		19	18.2		27	16.7	Febr.		22.1	27	20.3
Nov.	2	18.4		22	12.0	I	30	10.3	I	6	10.6	32	8.7

## Elongationen und Konjunktionen (in Welt-Zeit)

l(a)	TITAN		. N		T	ITA	. N	HYPERION			
		h				h				h	
Jan.	2	7.4	Ob. Konj.	Okt.	28	3.9	Westl. El.	Aug.	21		Ob. Konj.
	6	10.0	Östl. El.	Nov.	1	0.2	Ob. Konj.		26		Östl. El.
	IO	13.8	Unt. Konj.		5		Östl. El.	Sept.	I	12.6	Unt. Konj.
	14	10.7	Westl. El.		9	5.8	Unt. Konj.		7	4.5	Westl. El.
	18	6.5	Ob. Konj.		13	1.3	Westl. El.		11	13.8	Ob. Konj.
	22	9.2	Östl. El.		16	21.5	Ob. Konj.		16	12.0	Östl. El.
	26	13.1	Unt. Konj.		21	_	Östl. El.		22	21.2	Unt. Konj.
	30	10.1	Westl. El.		25	3.2	Unt. Konj.		28	12.8	Westl. El.
Febr.	3	6.0	Ob. Konj.		28	22.8	Westl. El.	Okt.	2	21.7	Ob. Konj.
	7	8.9	Östl. El.	Dez.	2	19.0	Ob. Konj.		7	19.6	Östl. El.
	II	_	Unt. Konj.		6		Östl. El.		14	4.6	Unt. Konj.
	15	-	Westl. El.		11	0.0	Unt. Konj.		19	1	Westl. El.
	19	1 1	Ob. Konj.		14		Westl. El.		24	5.0	Ob. Konj.
		3.9		1	18		Ob. Konj.		29		Östl. El.
					22	1	Östl. El.	Nov.	4	_	Unt. Konj.
					26		Unt. Konj.		10		Westl. El.
Juli	4	18.0	Unt. Konj.		30	1	Westl. El.		14		Ob. Konj.
0 411	8		Westl. El.		34		Ob. Konj.		19		Östl. El.
	12		Ob. Konj.		3+	1 3 - 1	00. 1101.		25	/	Unt. Konj.
	16		Östl. El.					Dez.	-23 I		Westl. El.
	20	-	Unt. Konj.		TTX	TOTAL	DION	1002.			Ob. Konj.
	24		Westl. El.		НΥ	PEI	RION		5	! -	Östl. El.
	28		Ob. Konj.						17	0 /	Unt. Konj.
Aug.	1		Östl. El.	Jan.	2	h OT 4	Östl. El.		22		Westl. El.
Aug.			Unt. Konj.	Jan.	3		Unt. Konj.				Ob. Konj.
	5		Westl. El.		9		Westl. El.		27		Östl. El.
	9		Ob. Konj.		20		Ob. Konj.		31	23.4	Usti. Ei.
	13		Östl. El.				Östl. El.				
	17				25		Unt. Konj.		т.	TOTAL	DITA
	21	0	Unt. Konj.	Febr.	31	0.3	Westl. El.		J E	APE:	rus
	25		Westl. El.	rebi.	6						
Cl 4	29	,	Ob. Konj.		10		Ob. Konj.	Turn	-0	h	Trut IZ
Sept.	2		Östl. El.		15		Ostl. El.	Jan.	18		Unt. Konj.
	6		Unt. Konj.		21	8.2	Unt. Konj.	Febr.	8	4.3	Westl. El.
	10		Westl. El.								
	14		Ob. Konj.								
	18		Östl. El.			h	337 /1 TH	T 11		h	*** (1 T3)
	22		Unt. Konj.	Juli	4		Westl. El.	Juli	19		Westl. El.
	26	8.8	Westl. El.		9	_	Ob. Konj.	Aug.	7		Ob. Konj.
01.	30		Ob. Konj.		14		Östl. El.	~ .	27		Östl. El.
Okt.	4		Ostl. El.		20	15.7	Unt. Konj.	Sept.	17	l .	Unt. Konj.
	8	_	Unt. Konj.		26		Westl. El.	Okt.	6		Westl. El.
	12	6.5	Westl. El.		30		Ob. Konj.		25	_	Ob. Konj.
	16		Ob. Konj.	Aug.	4	17.5	Östl. El.	Nov.	13	٠.	Östl. El.
	20		Östl. El.		II	2.7	Unt. Konj.	Dez.	4		Unt. Konj.
	24	8.5	Unt. Konj.		16	19.4	Westl. El.		24	4.0	Westl. El.

		Konstonat	anonen 1940				
Welt-2	Zeit		Welt-Z	Zeit			
1940	1		1940	1			
-	6 <sup>h</sup>	144 1 7	April 8	h	24 ♂ €		
	3	\$ 3 €	1 -	3			
2	6	⊙ in Erdnähe	9	2	5 d €		
7	15	3 6 24, 3 1° 10′ N	10	9	Ŭ im Aphel		
8	10	\$ d (	10	II	\$ 6 (		
12	13	₽ 6 €	II	0	우 성 경, 오 2° 11′ N.		
13	10	♥ im Aphel	II	19	3 3 €		
15	22	24 ♂ €	11	19	5 9 €		
16	7	3 3 €	11	22	4 3 ⊙		
17	17	5 3 €	12	9	⊈ gr. westl. El. 27° 40′		
19	II	\$ 3 (	17	12	♀ gr. östl. El. 45° 44′		
23	10	24 im Perihel	19	17	¥3(		
26	23		24	18	t 3 0		
28	_		24	10	5, 0, 0		
	12	\$90					
31	19	♀ obere ♂ ⊙					
			3.7	h	* / 21		
			Mai 5	5	ў <b>д</b> 24		
	h		5	23	4 6 €		
Febr. 9	2	\$ 9 C	6	I	¥ 3 €		
II	21	2 9 €	6	15	\$ 3 €		
12	15	24 ♂ €	7	20	\$ 9 (		
13	8	♂ ♂ ₺, ♂ 2° 59′ N.	10	9	호 d ħ, 호 o° 42' N.		
14	3	<b>5</b> 6 €	10	13	336		
14	4	336	11	4	9 0 €		
15	19	\$ 4 (	12	22	\$ 3 0		
20	22	\$ d 24, \$ 1' o° N.	17	0	¥ 3 (		
24	21		18	I	φ σ δ, φ ο°2′ S.		
	1		20	16	Q im größten Glanze		
26	9	ÿ im Perihel		20	© obere d ⊙		
28	11	ÿ gr. östl. El. 18° 9′	21				
			24	9	♥ im Perihel		
	h						
März 5	17	♥ stationär in AR.					
8	14	♀ ♂ ħ, ♀ 3° 22′ N.		h	a		
9	23	¥ d €	Juni 2	18	24 ♂ €		
II	8	24 d (	3	5	⊅ <		
12	14	5 3 €	3	22	Ψ stationär in AR.		
12	23	296	4	7	\$ 4 €		
14	0	± 0 € 3 d €	5	0	♀ stationär in AR.		
-		5 0 C	7	6	우 성 경, 우 ° 22' N.		
14	3	\$ d (	7	13	¥ 3 (		
14	21	Ψ & O	8	5	290		
15	- 15		8	6	\$ 5 (         \$ 5 (         \$ 5 (         \$ 5 (         \$ 5 (         \$ 5 (         \$ 5 (         \$ 5 (         \$ 5 (         \$ 6 (         \$ 6 (         \$ 6 (         \$ 7 (         \$ 8 (         \$ 8 (         \$ 9 (         \$ 10 (         \$ 2 (         \$ 10 (         \$ 2 (         \$ 10 (         \$ 2 (         \$ 10 (         \$ 2 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (         \$ 10 (		
16	18	♂ ♂ ♂, ♂ 1° 6′ N.	12	2	8 d 9 8 to 24' N		
20	18	Frühlingsanfang		6	¥ 0 ≠, ₹ 1 24 11. ♥ 0 €		
23	8	\$ 9 C	13				
26	14	♀♂ ô, ♀ 2°31′ N.	17	I	Ф d d, ф o° 26′ N.		
28	0		21	14	Sommersanfang		
29	I	♀ im Perihel	24	14	♥ gr. östl. El. 25° 18′		
			26	21	♀ untere ♂ ⊙		
			30	13	4 6 €		
			30	19	\$ 3 €		
April 5	13 <sup>h</sup>	¥ d €					
7	_3	oringf. Finsternis	1 2 1				
1	l l	O migi. Philsteinis					

Konstellationen 1940									
Welt-Z	eit		Welt-Z	eit					
1940	1		1940						
Juli 1	18	\$ 3 €	Sept. 30	ь 19	¥3 €				
4	10	in Erdferne	30	20	3 3 €				
4	13	9 0 €	3-		000				
6	22	300							
7	2	\$ d €	Okt. 1	ь	• totale Finsternis				
7	8		2	20	¥ d €				
7	19		. 3	7	ÿ im Aphel				
10	0	후 성 경, 후 4°24′ S.	11	23	24 d b, 24 1° 17′ N.				
10	12	\$ 9 C	18	0	24 0 €				
18	13	♀ stationär in AR.	18	0	₱ 3 €				
19	13	♀ im Aphel	19	0	\$30				
22	5	¤ untere d ⊙	20	16	♀ gr. östl. El. 24° 30′				
28	5	24 3 €	28	4	29€				
28	7	b d €	28	7	¥ 3 (				
29	4	\$ 0 €	29	12	3 3 €				
31	21	2 9 €	29	21	♀♂Ψ,♀о° 11′ N.				
Aug. 1	h			ħ					
Aug. 1	9 16	Ç im größten Glanze	Nov. 1	5	¥ d €				
2	17	¥ III grossen Granze	1	6	Ş stationär in AR.				
4	14	330	3	4	24 ♂ ⊙				
6	20	<b>3</b> 6 ♥	3	21	\$ 3 ⊙				
10	10	♀ gr. westl. El. 18° 57′	8	22	♀ im Perihel				
15	13	· 4 d b, 4 1° 15′ N.	11	23	♥ untere d ⊙,				
20	8	₫ im Perihel			Merkurdurchgang				
24	16	t d €	13	23	4 d €				
24	17	4 0 €	14	2	50€				
25	13	\$ 9 (	15	4	\$ 9 (				
26	r	♂ im Aphel	16	7	ÿ im Perihel				
27	23	ħ stationär in AR.	16	15	\$ 6 € O				
<b>2</b> 9	20	5 9 €	21	0	\$\text{\$\delta}\$ station\(\text{ar}\) in AR.				
30	9	3 0 0	24 26	17 22	490				
					9 0 €				
Sept. 1	h	3 stationär in AR.	27 27	3 22	3 d (				
Sept. 1	5	\$ d (	28	22	후 gr. westl. El. 20°11'				
2	3 5	₹ 0 €	20		7 g1. westi. 111. 20 11				
2	23	호 성 강, 호 o° 43'N.							
3	6	\$ d €	Dez. 2	12	오 성 경, 오 1° 17′ N.				
3 4	12		II	I	4 3 €				
4	20	24 stationär in AR.	11	6	5 3 €				
5	13	♀ gr. westl. El. 45° 57′	12	9	\$36				
11	15	Ф о Ψ, Ф о° 2′ N.	21	23	¥30				
18	8	¥ 3 0	22	0	Wintersanfang				
20	21	<b>₱ ७ ७</b>	25	18	33(				
20	23	4 3 €	26	18	29€				
21	19	\$ 6 (	28	6	\$ 3 €				
23	5	Herbstanfang	30	7	Ş im Aphel				
28	10	\$ 9 €	30	15	♥ stationär in AR.				
28	23	♂ ♂ Ѱ, ♂°° 13′S.	31	14	24 stationär in AR.				

## Präzession in Rektaszension $(p_a)$ und Deklination $(p_\delta)$

$p_{lpha}$										<i>20</i> p				
σδ	+60°	+50°	+40°	+30°	+20°	+10°	o°	-10°	-20°	-30°	-40°	-50°	-60°	$p_{\delta}$
h	В	В	8	8	В	8	В	8			В	8	8	
0	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	+20.0
I	3.67	3.48	3.36	3.27	3.20	3.13	3.07	3.01	2.95	2.87	2.78	2.66	2.47	+19.4
2	4.23	3.87	3.63	3.46	3.32	3.19	3.07	2.95	2.83	2.69	2.51	2.28	1.92	+17.4
3	4.71	4.20	3.87	3.62	3.42	3.24	3.07	2.91	2.73	2.53	2.28	1.95	1.44	+14.2
4	5.08	4.45	4.04	3.74	3.49	3.28	3.07	2.87	2.65	2.41	2.10	1.69	1.07	+10.0
5	5.31	4.61	4.16	3.82	3.54	3.30	3.07	2.84	2.60	2.33	1.99	1.53	0.84	+ 5.2
6	5.39	4.67	4.19	3.84	3.56	3.31	3.07	2.84	2.59	2.30	1.95	1.48	0.76	0.0
7	5.31	4.61	4.16	3.82	3.54	3.30	3.07	2.84	2.60	2.33	1.99	1.53	0.84	- 5.2
8	5.08	4.45	4.04	3.74	3.49	3.28	3.07	2.87	2.65	2.41	2.10	1.69	1.07	-10.0
9	4.71	4.20	3.87	3.62	3.42	3.24	3.07	2.91	2.73	2.53	2.28	1.95	1.44	-14.2
10	4.23	3.87	3.63	3.46	3.32	3.19	3.07	2.95	2.83	2.69	2.51	2.28	1.92	-17.4
II	3.67	3.48	3.36	3.27	3.20	3.13	3.07	3.01	2.95	2.87	2.78	2.66	2.47	-19.4
12	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	-20.0
13	2.47	2.66	2.78	2.87	2.95	3.01	3.07	3.13	3.20	3.27	3.36	3.48	3.67	<b>—</b> 19.4
14	1.92	2.28	2.51	2.69	2.83	2.95	3.07	3.19	3.32	3.46	3.63	3.87	4.23	-17.4
	_	T 05	2.28	2 52	_			-		•	3.87			
15 16	1.44	1.95	2.20	2.53	2.73	2.91	3.07	3.24	3.42	3.62		4.20	5.08	-14.2
17	0.84			2.41	2.60	2.84	3.07	3.28	3.49	3.74	4.04	4.45	1 -	-10.0
18	0.76	1.53	1.99	2.33		2.84	3.07	3.30	3.54	3.84	4.16	4.61	5.31	0.0
	0.84	1.48	1.95	2.30	2.59		3.07	3.31	3.56		4.19		5.39	1
19	0.04	1.53	1.99	2.33		2.84	3.07	3.30	3.54	3.82	4.16	4.61	5.31	+ 5.2
20	1.07	1.69	2.10	2.41	2.65	2.87	3.07	3.28	3.49	3.74	4.04	4.45	5.08	+10.0
21	1.44	1.95	2.28	2.53	2.73	2.91	3.07	3.24	3.42	3.62	3.87	4.20	4.71	+14.2
22	1.92	2.28	2.51	2.69	2.83	2.95	3.07	3.19	3.32	3.46	3.63	3.87	4.23	+17.4
23	2.47	2.66	2.78	2.87	2.95	3.01	3.07	3.13	3.20	3.27	3.36	3.48	3.67	+19.4
24	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	+20.0
					•	1	•			•				

# Präzessionswerte und Schiefe der Ekliptik

Zeit	m	n	ψ	log π	П	ε
1900.0	3.07234	20.0468	50.2564	9.67309	173 57.06	23°27′ 8″26
1905.0	3.07243	20.0464	50.2575	9.67305	173 59.80	23 27 5.92
1910.0	3.07252	20.0460	50.2586	9.67302	174 2.53	23 27 3.57
1915.0	3.07262	20.0456	50.2597	9.67299	174 5.27	23 27 1.23
1920.0	3.07271	20.0451	50.2608	9.67296	174 8.01	23 26 58.89
1925.0	3.07280	20.0447	50.2620	9.67293	174 10.75	23 26 56.54
1930.0	3.07289	20.0443	50.2631	9.67290	174 13.49	23 26 54.20
1935.0	3.07299	20.0439	50.2642	9.67287	174 16.23	23 26 51.86
1940.0	3.07308	20.0434	50.2653	9.67284	174 18.97	23 26 49.52
1945.0	3.07317	20.0430	50.2664	9.67281	174 21.71	23 26 47.17
1950.0	3.07327	20.0426	50.2675	9.67278	174 24.45	23 26 44.83

# Hilfstafeln

Präzession in Länge $p_{\lambda}$									Präz.	in Br. $p_{eta}$		
Länge					Brei	te B					Länge	Präzession
λ	o°	+10	+2°	+3°	+4°	+5°	+6°	+7°	+8°	+9°	λ	$p_{eta}$
°	50.268	"050	"	"042	"20"	50.227	.218	"	"	".193	°	+0.046
	.268	.259	.251	.243	.235			.210	.202			
10	.268	.260	.252	.244	.236	.228	.220	.212	.204	.196	10 20	+0.127 76
20	.268	.261	.253	.245	.238	.230	.223	.215	.214	.207		+0.203 71
30			.254	-247	.241	•234	.22/	.220	.214	.207	30	+0.274 62
40	50.268	.262	.256	.250	.244	50.239	.233	.227	.221	.215	40	+0.336
50	.268	.263	.258	.254	.249	.244	.240	.235	.230	.225	50	+0.388
60	.268	.264	.261	.257	.254	.250	.247	.244	.240	-237	60	+0.429 27
70	.268	.265	.263	.261	.259	.257	.255	.253	.251	.249	70	+0.456
80	50.268	.267	.266	.266	.265	50.264	.264	.263	.262	.262	80	
90	.268	.268	.269	.270	.271	.272	.272	.273	.274	.275	90	-1-0 168
100	.268	.270	.272	.274	.276	.279	.281	.283	.285	.288	100	+0.453 15
110	.268	.271	.275	.278	.282	.285	.289	.292	.296	.300	110	+0.425 42
120	50.268	.272	.277	.282	.287	50.291	.296	.301	.306	.311	120	+0.383 54
130	.268	.273	.279	.285	.291	.297	.303	.309	.315	.321	130	$+0.329 \frac{54}{63}$
140	.268	.274	.281	.288	.295	.301	.308	.315	.322	.329	140	+0.266
150	.268	.275	.282	.290	.297	.305	.313	.320	.328	-335	150	+0.195 78
160	50.268	.275	.283	.291	.299	50.307	.315	.323	.332	.340	160	+0.117 81
170	.268	.276	.284	.292	.300	.309	.317	-325	-333	.342	170	+0.036 82
180	.268	.276	.284	.292	.300	.308	.317	.325	-333	.342	180	-0.046 <sub>81</sub>
190	.268	.275	.283	.291	.299	.307	.315	·323	.331	-339	190	-0.127 <sub>76</sub>
200	50.268	.275	.282	.290	.297	50.305	.312	.320	.327	-335	200	-0.203 <sub>71</sub>
210	.268	.274	.281	.288	.294	.301	.308	.315	.321	.328	210	$-0.274_{62}^{71}$
220	.268	.273	.279	.285	.291	.296	.302	.308	.314	.320	220	-0.336 <sub>52</sub>
230	.268	.272	.277	.281	.286	.291	.295	.300	.305	.310	230	-0.388 <sub>41</sub>
240	50.268	.271	.274	.278	.281	50.285	.288	.291	.295	.298	240	-0.429 27
250	.268	.270	.272	.274	.276	.278	.280	.282	.284	.286	250	-0.456 <sub>13</sub>
260	.268	.268	.269	.269	.270	.271	.271	.272	.273	.273	260	$-0.469\frac{3}{1}$
270	.268	.267	.266	.265	.264	.263	.263	.262	.261	.260	270	-0.468 <sub>15</sub>
280	50.268	.265	.263	.261	.259	50.256	.254	.252	.250	.247	280	-0.453 <sub>28</sub>
290	.268	.264	.260	.257	.253	.250	.246	.243	.239	.235	290	-0.425 42
300	.268	.263	.258	.253	.248	.244	.239	.234	.229	.224	300	-0.383 <sub>54</sub>
310	.268	.262	.256	.250	.244	.238	.232	.226	.220	.214	310	-0.329 <sub>63</sub>
320	50.268	.261	.254	.247	.240	50.234	.227	.220	.213	.206	320	-0.266 <sub>71</sub>
330	.268	-260	.253	.245	.238	.230	.222	.215	.207	.200	330	-0.195 <sub>78</sub>
340	.268	.260	.252	.244	.236	.228	.220	.212	.203	.195	340	-0.117 81
350	.268	.259	.251	.243	.235	.226	.218	.210	.202	.193	350	-0.036 82
360	50.268	.259	.251	.243	.235	50.227	.218	.210	.202	.193	360	+0.046

	Präzession in Länge $p_{\lambda}$										Präz	. in Br. $p_{eta}$
Länge					Brei	te β					Länge	Präzession
λ	o°	-1°	-2°	-3°	-4°	-5°	-6°	-7°	-8°	-9°	λ	$p_{eta}$
0		,,	,,	,,		"	,,			,,	0	,,
0	50.268	.276	.284	.292	.300	50.308	.317	.325	.333	.342	0	+0".046 81
10	.268	.275	.283	.291	.299	.307	.315	.323	.331	-339	10	+0.127 76
20	.268	.275	.282	.290	.297	-305	.312	.320	-327	•335	20	+0.203 71
30	.268	.274	.281	.288	.294	.301	.308	.315	.321	.328	30	+0.274 62
40	50.268	.273	.279	.285	.291	50.296	.302	.308	.314	.320	40	+0.336
50	.268	.272	.277	.281	.286	.291	.295	.300	.305	.310	50	+0.388
60	.268	.271	.274	.278	.281	.285	.288	.291	.295	.298	60	+0.429 27
70	.268	.270	.272	.274	.276	.278	.280	.282	.284	.286	70	+0.456
80	50.268	.268	.269	.269	.270	50.271	.271	.272	.273	.273	80	+0.469
90	.268	.267	.266	.265	.264	.263	.263	.262	.261	.260	90	+0.468
100	.268	.265	.263	.261	.259	.256	.254	.252	.250	.247	100	+0.453 28
110	.268	.264	.260	-257	.253	.250	.246	.243	.239	.235	110	+0.425 42
120	50.268	.263	.258	.253	.248	50.244	.239	.234	.229	.224	120	10.282
130	.268	.262	.256	.250	.244	.238	.232	.226	.220	.214	130	$+0.303_{63}$ $+0.329_{63}$
140	.268	.261	.254	.247	.240	.234	.227	.220	.216	.206	140	±0.266
150	.268	.260	-253	.245	.238	.230	.222	.215	.207	.200	150	+0.195 78
160	50.268	.260	.252	.244	.236	50.228	.220	.212	.203	.195	160	+0.117 <sub>81</sub>
170	.268	.259	.251	.243	.235	.226	.218	.210	.202	.193	170	$+0.036\frac{81}{82}$
180	.268	.259	.251	.243	.235	.227	.218	.210	.202	.193	180	$-0.046 \frac{82}{81}$
190	.268	.260	.252	.244	.236	.228	.220	.212	.204	.196	190	-0.127 76
200	50.268	.260	.253	.245	.238	50.230	.223	.215	.208	.200	200	-0.202
210	.268	.261	.254	.247	.241	.234	.227	.220	.214	.207	210	0.054
220	.268	.262	.256	.250	.244	.239	.233	.227	.221	.215	220	-0.226
230	.268	.263	.258	.254	.249	.244	.240	.235	.230	.225	230	-0.288
240	50.268	.264	.261						.240		240	Т-
	.268	.265		.257 .261	.254	50.250	.247	.244	_	.237	250	-0.429 $-0.456$
250 260	.268	.267	.263	.266	.259	.257	.255	.253	.251	.249	260	-0.460
270	.268	.268	.269	.270	.265	.264	.272	.263	.274	.275	270	- 160
												-5
280	50.268	.270	.272	.274	.276	50.279	.281	.283	.285	.288	280	-0.453 <sub>28</sub>
290	.268	.271	.275	.278	.282	.285	.289	.292	.296	.300	290	-0.425 <sub>42</sub>
300	.268	.272	.277	.282	.287	.291	.296	.301	.306	.311	300	-0.383 <sub>54</sub>
310	.268	.273	.279	.285	.291	.297	.303	.309	.315	.321	310	$-0.329_{63}^{51}$
320	50.268	.274	.281	.288	.295	50.301	.308	.315	.322	.329	320	-0.266 <sub>71</sub>
330	.268	.275	.282	.290	.297	-305	.313	.320	.328	·335	330	-0.195 <sub>78</sub>
340	.268	.275	.283	.291	.299	.307	.315	.323	.332	.340	340	-0.117 %
350	.268	.276	.284	.292	.300	.309	-317	.325	•333	.342	350	$-0.036_{82}$
360	50.268	.276	.284	.292	.300	50.308	.317	-325	-333	.342	360	+0.046

316\* Verwandlung von mittlerer Zeit in Sternzeit

Red.	om	Im	2 <sup>m</sup>	3 <sup>m</sup>	Red.		Red.	
8	h m s	6 5 15	h m s	h m s	8	m s	8	m s
0	0 6 5	6 5 15	12 10 29	18 15 44	0.00	0 0	0.50	3 3
2	0 12 10	6 17 25	12 22 40	18 21 49	0.02	0 4	0.52	3 6
3	0 18 16	6 23 30	12 28 45	18 33 59	0.03	0 11	0.53	3 14
4	0 24 21	6 29 36	12 34 50	18 40 5	0.04	0 15	0.54	3 17
5	0 30 26	6 35 41	12 40 55	18 46 10	0.05	0 18	0.55	3 21
6	0 36 31	6 41 46	12 47 1	18 52 15	0.06	0 22	0.56	3 25
7	0 42 37	6 47 51	12 53 6	18 58 20	0.07	0 26	0.57	3 28
8	0 48 42	6 53 56	12 59 11	19 4 26	0.08	0 29	0.58	3 32
9	0 54 47	7 0 2	13 5 16	19 10 31	0.09	0 33	0.59	3 35
10	1 0 52	7 6 7	13 11 21	19 16 36	0,10	0 37	0.60	3 39
11	ı 6 58	7 12 12	13 17 27	19 22 41	0.11	0 40	0.61	3 43
12	1 13 3	7 18 17	13 23 32	19 28 47	0.12	0 44	0.62	3 46
13	1 19 8	7 24 23	13 29 37	19 34 52	0.13	0 47	0.63	3 50
14	1 25 13	7 30 28	13 35 42	19 40 57	0.14	0 51	0.64	3 54
15	1 31 19	7 36 33	13 41 48	19 47 2	0.15	0 55	0.65	3 57
16	I 37 24 I 43 29	7 42 38 7 48 44	13 47 53	19 53 7	0.16	0 58	0.66 0.67	4 1
17 18	I 43 29 I 49 34	7 48 44 7 54 49	13 53 58	19 59 13	0.17	1 6	0.68	4 5 4 8
19	1 55 40	8 0 54	14 6 9	20 11 23	0.19	1 9	0.69	4 12
20	2 I 45	8 6 59	14 12 14	20 17 28	0.20	I 13	0.70	4 16
21	2 7 50	8 13 5	14 18 19	20 23 34	0.21	1 17	0.71	4 19
22	2 13 55	8 19 10	14 24 24	20 29 39	0.22	1 20	0.72	4 23
23	2 20 I	8 25 15	14 30 30	20 35 44	0.23	1 24	0.73	4 27
24	2 26 6	8 31 20	14 36 35	20 41 49	0.24	1 28	0.74	4 30
25	2 32 11	8 37 26	14 42 40	20 47 55	0.25	1 31	0.75	4 34
26	2 38 16	8 43 31	14 48 45	20 54 0	0.26	1 35	0.76	4 38
27	2 44 22	8 49 36	14 54 51	21 0 5	0.27	1 39	0.77	4 41
28	2 50 27	8 55 41	15 0 56	21 6 10	0.28	I 42	0.78	4 45
29	2 56 32	9 1 47	15 7 1	21 12 16	0.29	1 46	0.79	4 49
30	3 2 37	9 7 52	15 13 6	21 18 21	0.30	I 50	0.80	4 52
31	3 8 43	9 13 57	15 19 12	21 24 26	0.31	1 53	0,81	4 56
32	3 14 48	9 20 2	15 25 17	21 30 31	0.32	I 57	0.82	4 59
33	3 20 53 3 26 58	9 32 13	15 31 22 15 37 27	21 36 37 21 42 42	0.33	2 I 2 4	0.83	5 3 5 7
35	3 33 3	9 38 18	15 43 33	21 48 47	0.35	2 8	0.85	5 10
36	3 39 9	9 44 23	15 49 38	21 54 52	0.36	2 11	0.86	5 14
37	3 45 14	9 50 28	15 55 43	22 0 58	0.37	2 15	0.87	5 18
38	3 51 19	9 56 34	16 I 48	22 7 3	0.38	2 19	0.88	5 21
39	3 57 24	10 2 39	16 7 54	22 13 8	0.39	2 22	0.89	5 25
40	4 3 30	10 8 44	16 13 59	22 19 13	0.40	2 26	0.90	5 29
41	4 9 35	10 14 49	16 20 4	22 25 19	0.41	2 30	0.91	5 32
42	4 15 40	10 20 55	16 26 9	22 31 24	0.42	2 33	0.92	5 36
43	4 21 45	10 27 0	16 32 14	22 37 29	0.43	2 37	0.93	5 40
44	4 27 51	10 33 5	16 38 20	22 43 34	0.44	2 41	0.94	5 43
45	4 33 56	10 39 10	16 44 25	22 49 39	0.45	2 44	0.95	5 47
46	4 40 I	10 45 16	16 50 30	22 55 45	0.46	2 48	0.96	5 51
47	4 46 6	10 51 21	16 56 35	23 1 50	0.47	2 52	0.97	5 54 5 58
48	4 52 12 4 58 17	10 57 26	17 2 41 17 8 46	23 7 55 23 14 0	0.48 0.49	2 55 2 59	0.98	5 58 6 2
49					0.50		1,00	
50	5 4 22 5 10 27	11 9 37	17 14 51	23 20 6 23 26 II	0.50	3 3	1,00	6 5
51 52	5 10 27 5 16 33	11 15 42 11 21 47	17 27 2	23 32 16				
53	5 22 38	11 27 52	17 33 7	23 38 21		Die R	eduktio	n
54	5 28 43	11 33 58	17 39 12	23 44 27	is	t zur m		
55	5 34 48	11 40 3	17 45 17	23 50 32			ldieren.	
56	5 40 54	11 46 8	17 51 23	23 56 37				
57	5 46 59	11 52 13	17 57 28	24 2 42				
۲8	£ £2 4	TT 68 TO	18 2 22	24 8 48				

Red.	om	ım	2 <sup>m</sup>	3 <sup>m</sup>	Red.		Red.	
0	h m s	6 6 15	h m s	18 18 44	8 0.00	m s	0.50	m s
1	0 6 6	6 12 21	12 18 35	18 24 50	0.01	0 4	0.51	3 3 7
2	0 12 12	6 18 27	12 24 42	18 30 56	0.02	0 7	0.52	3 10
3	0 18 19	6 24 33	12 30 48	18 37 2	0.03	0 11	0.53	3 14
4	0 24 25	6 30 40	12 36 54	18 43 9	0.04	0 15	0.54	3 18
5	0 30 31	6 36 46	12 43 0	18 49 15	0.05	0 18	0.55	3 21
6	0 36 37	6 42 52	12 49 7	18 55 21	0.06	0 22	0.56	3 25
7	0 42 44	6 48 58	12 55 13	19 I 27	0.07	0 26	0.57	3 29
8	0 48 50	6 55 4	13 1 19	19 7 34	0.08	0 29	0.58	3 32
_ 9_	0 54 56	7 1 11	13 7 25	19 13 40	0.09	0 33	0.59	3 36
10	I I 2	7 7 17	13 13 31	19 19 46	0.10	0 37	0.60	3 40
11	1 7 9	7 13 23	13 19 38	19 25 52	0.11	0 40	0.61	3 43
12	I 13 15 I 19 21	7 19 29 7 25 36	13 25 44	19 31 59	0.12	0 44	0.62	3 47
13	I 19 21 I 25 27	7 25 36 7 31 42	13 31 50 13 37 56	19 38 5	0.14	0 48	0.64	3 51
15	1 31 34	7 37 48	13 44 3	19 50 17	0.15	0 55	0.65	3 58
16	1 37 40	7 43 54	13 50 9	19 56 23	0.16	0 59	0.66	4 2
17	1 43 46	7 50 I	13 56 15	20 2 30	0.17	I 2	0.67	4 5
18	1 49 52	7 56 7	14 2 21	20 8 36	0.18	16	0.68	4 9
19	I 55 59	8 2 13	14 8 28	20 14 42	0.19	I 10	0.69	4 13
20	2.2 5	8 8 19	14 14 34	20 20 48	0.20	1 13	0.70	4 16
21	2 8 11	8 14 26	14 20 40	20 26 55	0.21	1 17	0.71	4 20
22	2 14 17	8 20 32	14 26 46	20 33 I	0.22	1 21	0.72	4 24
23	2 20 24	8 26 38 8 32 44	14 32 53	20 39 7	0,23	I 24	0.73	4 27
24	2 26 30 2 32 36	0 0 11	14 38 59	20 45 13	0.24	1 28	0.74	4 31
25 26	2 32 36 2 38 42	8 38 51 8 44 57	14 45 5	20 51 20	0.25	I 32	0.75 0.76	4 35
27	2 44 49	8 51 3	14 51 11	20 57 26 21 3 32	0.27	1 35 1 39	0.77	4 38
28	2 50 55	8 57 9	15 3 24	21 9 38	0.28	1 43	0.78	4 46
29	2 57 I	9 3 16	15 9 30	21 15 45	0.29	1 46	0.79	4 49
30	3 3 7	9 9 22	15 15 36	21 21 51	0.30	I 50	0.80	4 53
31	3 9 14	9 15 28	15 21 43	21 27 57	0.31	1 54	0.81	4 57
32	3 15 20	9 21 34	15 27 49	21 34 3	0.32	I 57	0.82	5 0
33	3 21 26	9 27 41	15 33 55	21 40 10	0.33	2 I	0.83	5 4
34	3 27 32	9 33 47	15 40 I	21 46 16	0.34	2 5	0.84	5 8
35	3 33 38	9 39 53	15 46 8	21 52 22	0.35	2 8	0.85	5 11
36	3 39 45 3 45 51	9 45 59 9 52 5	15 52 14 15 58 20	21 58 28	0.36	2 12 2 16	0.86	5 15
37 38	3 45 51 3 51 57	9 52 5 9 58 12	16 4 26	22 4 35	0.37	2 19	0.88	5 19 5 22
39	3 58 3	10 4 18	16 10 33	22 16 47	0.39	2 23	0.89	5 26
40	4 4 10	10 10 24	16 16 39	22 22 53	0.40	2 26	0.90	5 30
41	4 10 16	10 16 30	16 22 45	22 29 0	0.41	2 30	0.91	5 33
42	4 16 22	10 22 37	16 28 51	22 35 6	0.42	2 34	0.92	5 37
43	4 22 28	10 28 43	16 34 57	22 41 12	0.43	2 37	0.93	5 41
44	4 28 35	10 34 49	16 41 4	22 47 18	0.44	2 41	0.94	5 44
45	4 34 41	10 40 55	16 47 10	22 53 24	0.45	2 45	0.95	5 48
46	4 40 47	10 47 2	16 53 16	22 59 31	0.46	2 48	0.96	5 52
47	4 46 53	10 53 8	16 59 22	23 5 37	0.47	2 52	0.97	5 55
48 49	4 53 6	10 59 14	17 5 29	23 11 43 23 17 49	0.48	2 56	0.98	5 59 6 3
							1.00	6 6
50 51	5 5 12 5 11 18	11 11 27	17 17 41 17 23 47	23 23 56 23 30 2	0.50	3 3	1.00	0 0
52	5 17 25	11 23 39	17 29 54	23 36 8				
53	5 23 31	11 29 45	17 36 0	23 42 14		Die I	Redukti	on
54	5 29 37	11 35 52	17 42 6	23 48 21	i	st von d		
55	5 35 43	11 41 58	17 48 12	23 54 27		zu sub	trahier	en.
56	5 41 50	11 48 4	17 54 19	24 0 33				
57	5 47 56	11 54 10	18 0 25	24 6 39				
58	5 54 2 6 0 8	12 0 17	18 6 31	24 12 46				
59	0 0 8	12 6 23	18 12 37	24 18 52				

Red.	Om	1 <sup>m</sup>	2 <sup>m</sup>	3 <sup>m</sup>	Red.	Red.		Red.	
8	h m a	6 5 14.5	h m s	18 15 43.6	8	6 0,00	m 8	0.50	m 8
ī	6 5.2	11 19.8	16 34.3	21 48.8	I	10	3.7	51	3 2.6
2	12 10.5	17 25.0	22 39.6	27 54.1	2	02	7.3	52	9.9
3	18 15.7	23 30.3	28 44.8	33 59.3	3	03	11.0	53	13.6
4	24 21.0	29 35.5	34 50.0	40 4.6	4	04	14.6	54	17.2
5	30 26.2 36 31.5	35 4°.7 41 46.0	4º 55.3 47 º.5	46 9.8 52 15.1	5	0.05	21.9	56	20.9
7	42 36.7	47 51.2	53 5.8	18 58 20.3	7	07	25.6	57	28.2
- 8	48 41.9	6 53 56.5	12 59 11.0	19 4 25.5	8	08	29.2	58	31.8
9	0 54 47.2	7 0 1.7	13 5 16.2	10 30.8	9	09	32.9	59	35.5
11	6 57.7	6 7.0 12 12.2	11 21.5 17 26.7	16 36.0 22 41.3	10	0.10	36.5 40.2	0.60 61	39.1 42.8
12	13 2.9	18 17.4	23 32.0	28 46.5	12	12	43.8	62	46.5
13	19 8.1	24 22.7	29 37.2	34 51.8	13	13	47.5	63	50.1
14	25 13.4	30 27.9	35 42.5	40 57.0	14	14	51.1	64	53.8
15	31 18.6	36 33.2	41 47.7	47 2.2	15	0.15	54.8	0.65	3 57.4
16	37 23.9	42 38.4	47 52.9	53 7.5	16	16	0 58.4	66	4 1.1
17	43 29.1	48 43.7 7 54 48.9	13 53 58.2	19 59 12.7	17	17	1 2.1	67 68	4.7 8.4
19	49 34.4 1 55 39.6	8 0 54.1	14 0 3.4 6 8.7	11 23.2	19	19	5. <b>7</b> 9.4	69	12.0
20	2 1 44.8	6 59.4	12 13.9	17 28.4	20	0.20	13.0	0.70	15.7
21	7 50.1	13 4.6	18 19.2	23 33.7	21	21	16.7	71	19.3
22	13 55.3	19 9.9	24 24.4	29 38.9	22	22	20.4	72	23.0
23	20 0.6	25 15.1	30 29.6	35 44.2	23	23	24.0	73	26,6
24	26 5.8	31 20.3	36 34.9	41 49.4	24	24	27.7	74	30.3
25 26	32 II.I 38 16.3	37 25.6 43 30.8	48 45.4	47 54.7	25	26	31.3	0.75 76	33.9
27	44 21.5	49 36.1	14 54 50.6	21 0 5.1	27	27	38.6	77	41.2
28	50 26.8	8 55 41.3	15 0 55.9	6 10.4	28	28	42.3	78	44.9
29	2 56 32.0	9 1 46.6	7 1.1	12 15.6	29	29	45.9	79	48.5
30	3 2 37-3	7 51.8	13 6.3	18 20.9	30	0.30	49.6	0.80	52.2
31	8 42.5	13 57.0	19 11.6	24 26.1	31	31	53.2	81	55.8
32 33	14 47.8 20 53.0	20 2.3 26 7.5	25 16.8 31 22.1	30 31.4 36 36.6	32	32	2 0.5	82 83	4 59.5
34	26 58.2	32 12.8	37 27.3	42 41.8	33 34	33 34	4.2	84	6.8
35	33 3.5	38 18.0	43 32.5	48 47.1	35	0.35	7.8	0.85	10.5
36	39 8.7	44 23.3	49 37.8	21 54 52.3	36	36	11.5	86	14.1
37	45 14.0	50 28.5	15 55 43.0	22 0 57.6	37	37	15.1	87	17.8
38	51 19.2	9 56 33.7	16 1 48.3	7 2.8	38	38	18.8	88	21.4
39 40	3 57 24.4 4 3 29.7	10 2 39.0 8 44.2	7 53.5 13 58.8	13 8.0	39 40	39 0.40	22.4	0.90	25.1 28.7
41	4 3 29.7 9 34.9	14 49.5	20 4.0	25 18.5	41	41	29.7	91	32.4
42	15 40.2	20 54.7	26 9.2	31 23.8	42	42	33-4	92	36.0
43	21 45.4	27 0.0	32 14.5	37 29.0	43	43	37.1	93	39.7
44	27 50.7	33 5.2	38 19.7	43 34-3	44	44	40.7	94	43.3
45	33 55.9	39 10.4	44 25.0	49 39.5	45	0.45	44.4	0.95	47.0 50.6
46	46 6.4	45 15.7 51 20.9	50 30.2 16 56 35.5	22 55 44.7 23 I 50.0	46	46 47	48.0	96 97	54.3
47 48	52 11.6	10 57 26.2	17 2 40.7	7 55.2	48	48	55.3	98	5 57.9
49	4 58 16.9	11 3 31.4	8 45.9	14 0.5	49	0.49	2 59.0	0.99	6 r.6
50	5 4 22.1	9 36.6	14 51.2	20 5.7	50	Red.	Red.		ed.
51	10 27.4	15 41.9	20 56.4	26 11.0	51		ä	R	
52	16 32.6	21 47.1	27 1.7	32 16.2	52	0.000 g	0.003	g 0.0	006
53	22 37.8	27 52.4	33 6.9	38 21.4	53	0.		1.3	2.4
54 55	28 43.1 34 48.3	33 57.6	39 12.1 45 17.4	44 26.7 50 31.9	54	001	004	-	007
56	40 53.6	46 8.1	51 22.6	23 56 37.2	56	002	5   οος	1.6	2.7 oc8
57	46 58.8	52 13.3	17 57 27.9	24 2 42.4	57	0.2		2.0	3.1
58	53 4.0	11 58 18.6	18 3 33.1	8 47.7	58	003	006		009
59	5 59 9.3	12 4 23.8	18 9 38.4	24 14 52.9	59	I.	-	2.4	3.5
D.	D. 1.10			77.		0.004	0.007	0.0	010
Die	Keduktion	ist zur m	ittleren Zei	t zu addier	en.				3.8

Red.	o <sub>m</sub>	I <sup>m</sup>	2 <sup>m</sup>	3 <sup>m</sup>	Red.	Red.		Red.	
8	b m s	6 6 14.5	h m 8	18 18 43.6	8	8	a m.	8 0.50	m s 3.1
1	6 6.2	12 20.8	18 35.3	24 49.9	I	0.00	3.7	51	
2	12 12.5	18 27.0	24 41.6	30 56.1	2	02	7.3	52	
3	18 18.7	24 33.3	30 47.8	37 2.3	3	03	11.0	53	
4	24 25.0	30 39.5	36 54.0	43 8.6	4	04	14.6	54	
5	30 31.2 36 37.5	36 45.7	43 0.3	49 14.8 18 55 21.1	-5	0.05	18.3	0.55 56	
7	42 43.7	48 58.2	12 55 12.8	19 1 27.3	7	07	25.6	57	
8	48 49.9	6 55 4.5	13 1 19.0	7 33.5	8	08	29.3	58	
9	0 54 56.2	7 1 10.7	7 25.3	13 39.8	9	09	33.0	59	(
10	7 8.7	7 17.0 13 23.2	13 31.5	19 46.0	10	0.10	36.6	0.60	2,,
11	7 8.7 13 14.9	19 29.4	19 37.7 25 44.0	25 52.3 31 58.5	12	11	40.3 43.9	62	
13	19 21.1	25 35.7	31 50.2	38 4.8	13	13	47.6	63	50.7
14	25 27.4	31 41.9	37 56.5	44 11.0	14	14	51.3	64	
15	31 33.6	37 48.2	44 2.7	50 17.2	15	0.15	54.9	0.65	3 58.1
16	37 39-9	43 54-4	50 8.9	19 56 23.5	16	16	0 58.6	66	
17	43 46.1 49 52.4	50 0.7 7 56 6.9	13 56 15.2	20 2 29.7 8 36.0	17	17	I 2.3	67 68	9.0
19	1 55 58.6	8 2 13.1	8 27.7	14 42.2	19	19	9.6	69	
20	2 2 4.8	8 19.4	14 33.9	20 48.5	20	0.20	13.2	0.70	
21	8 11.1	14 25.6	20 40.2	26 54.7	21	21	16.9	71	20.0
22	14 17.3	20 31.9	26 46.4	33 0.9	22	22	20.6	72	23.7
23	20 23.6 26 29.8	26 38.1 32 44.4	32 52.6 38 58.9	39 7.2 45 13.4	23	23 24	24.2 27.9	73	27.4
24 25	32 36.1	38 50.6	45 5.1	51 19.7	25	0.25	31.6	74 0.75	34.7
26	38 42.3	44 56.8	51 11.4	20 57 25.9	26	26	35.2	76	38.3
27	44 48.5	51 3.1	14 57 17.6	21 3 32.2	27	27	38.9	77	42.0
28	50 54.8	8 57 9.3	15 3 23.9	9 38.4	28	28	42.5	78	45.7
29	2 57 1.0	9 3 15.6 9 21.8	9 30.1	15 44.6	29	29	46.2	79 o.8o	49.3
30	3 3 7.3 9 13.5	15 28.0	15 36.3 21 42.6	21 50.9 27 57.1	30	0.30	49.9 53.5	81	53.0 4 56.7
32	15 19.8	21 34.3	27 48.8	34 3.4	32	32	1 57.2	82	5 0.3
33	21 26.0	27 40.5	33 55.1	40 9.6	33	33	2 0.9	83	4.0
34	27 32.2	33 46.8	40 1.3	46 15.8	34	34	4.5	84	7.6
35	33 38.5	39 53.0	46 7.6	52 22.1	35	0.35	8.2	0.85 86	11.3
36	39 44.7 45 51.0	45 59·3 52 5·5	52 13.8	21 58 28.3 22 4 34.6	36	36 37	15.5	87	15.0
38	51 57.2	9 58 11.7	16 4 26.3	10 40.8	38	38	19.2	88	22.3
39	3 58 3.4	10 4 18.0	10 32.5	16 47.1	39	39	22.8	89	26.0
40	4 4 9.7	10 24.2	16 38.8	22 53.3	40	0.40	26.5	0.90	29.6
41	10 15.9	16 30.5	22 45.0	28 59.5	41	41	30.2	91	33.3
42	16 22.2 22 28.4	22 36.7 28 43.0	28 51.2 34 57·5	35 5.8 41 12.0	42	42	33.8 37·5	92	36.9 40.6
44	28 34.7	34 49.2	41 3.7	47 18.3	44	44	41.1	94	44.3
45	34 40.9	40 55.4	47 10.0	53 24.5	45	0.45	44.8	0.95	47.9
46	40 47.1	47 1.7	53 16.2	22 59 30.8	46	46	48.5	96	51.6
47	46 53.4	53 7.9	16 59 22.5	23 5 37.0	47	47	52.1	97	55.3
48	52 59.6 4 59 5.9	10 59 14.2	17 5 28.7	17 49.5	48	0.49	55.8 2 59.5	98 0.99	5 58.9 6 2.6
49 50	5 5 12.1	11 26.7	11 34.9	23 55.7	49 50			0.99	
51	11 18.4	17 32.9	23 47.4	30 2.0	51	Red.	Red.		Red.
52	17 24.6	23 39.1	29 53.7	36 8.2	52	0,000	0.003	8	0.006
53	23 30.8	29 45.4	35 59.9	42 14.5	53	0.		1.3	2.4
54	29 37.1	35 51.6	42 6.2 48 12.4	48 20.7	54	COI	00		007
55 56	35 43·3 41 49.6	41 57.9 48 4.1	17 54 18.6	23 54 20.9	55	0,		1.6	2.7
57	47 55.8	11 54 10.3	18 0 24.9	6 39.4	57	002	00	2.0	008
58	5 54 2.1	12 0 16.6	6 31.1	12 45.7	58	003	.9		3.1
59	6 0 8.3	12 6 22.8	18 12 37.4	24 18 51.9	59		.3	2.4	3.5
D.	D 1 1 4		a			0.004	0,00	7	0.010
Die	Reduktion	ist von der	Sternzeit z	u subtrahier	en.				3.8

# <sup>320\*</sup> Verwandlung von Stunden, Minuten und Sekunden

	oh	I,p	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>		
	n d	d	d	d	d	d	6	đ
0	0.000000	0.041667	0.083333	0.125000	0.166667	0.208333	0	0.000000
1	000694	042361	084028	125694	167361	209028	I	000012
2	001389	043056 043750	085417	126389	168056 168750	209722	2	000023
<b>-</b> 3	002083	043750	086111	127778	169444	211111	3 4	000035
5	0.003472	0.045139	0.086806	0.128472	0.170139	0.211806	5	0,000058
6	004167	045833	087500	129167	170833	212500	6	000069
7	004861	046528	088194	129861	171528	213194	7	000081
8	005556	047222	088889	130556	172222	213889	8	000093
- 9	006250	047917	089583	131250	172917	214583	9	000104
10	0.006944	0.048611	0.090278	0.131944	0.173611	0.215278	10	0.000116
11	007639	049306	090972	132639	174306	215972	11	000127
12	008333	050000	091667	133333	175000	216667	12	000139
13	009028	050694	092361	134028	175694	217361	13	000150
14	009722	051389	093056	134722	176389	218056	14	000162
- 15 16	0.010417	0.052083	0.093750	0.135417	0.177083	0.218750	15 16	0.000174
17	011806	052//0	094444	136806	178472	220139	17	000197
18	012500	054167	095833	137500	179167	220833	18	000208
19	013194	054861	096528	138194	179861	221528	19	000220
20	0.013889	0.055556	0.097222	0.138889	0.180556	0.222222	20	0,000231
_ 21	014583	056250	097917	139583	181250	222917	21	000243
22	015278	056944	098611	140278	181944	223611	22	000255
23	015972	057639	099306	140972	182639	224306	23	000266
24	016667	058333	100000	141667	183333	225000	24	000278
25	0.017361	0.059028	0.100694	0.142361	0.184028	0.225694	25	0.000289
26	018056	059722	101389	143056	184722	226389	26	000301
- 27 28	018750	060417	102083	143750	185417 186111	227083	27	000313
20	019444	061806	102778	144444	186806	227778	20	000324
***************************************	0.020833	0.062500		0.145833	0.187500			
30	0.020833	0.002500	0.104167	146528	188194	0.229167 229861	30	0.000347
32	022222	063889	105556	147222	188889	230556	32	000370
- 33	022917	064583	106250	147917	189583	231250	33	000382
34	023611	065278	106944	148611	190278	231944	34	000394
35	0.024306	0.065972	0.107639	0.149306	0.190972	0.232639	35	0.000405
36	025000	066667	108333	150000	191667	233333	36	000417
37	025694	067361	109028	150694	192361	234028	37	000428
38	026389	o68o56 o68750	109722	151389	193056	234722 235417	38	000440
▶ 39	027083						39	
40	0.027778	0.069444	0.111111	0.152778	0.194444	0.236111 236806	40	0.000463
41 42	028472	070139	112500	153472	195139	237500	4I 42	000475
42	029107	071528	113194	154861	196528	238194	43	000498
44	030556	072222	113889	155556	197222	238889	44	000509
- 45	0.031250	0.072917	0.114583	0.156250	0.197917	0.239583	45	0.000521
46	031944	073611	115278	156944	198611	240278	46	000532
47	032639	074306	115972	157639	199306	240972	47	000544
48	033333	075000	116667	158333	200000	241667	48	000556
49	034028	075694	117361	159028	200694	242361	49	000567
50	0.034722	0.076389	0.118056	0.159722	0.201389	0.243056	50	0.000579
- 51	035417	077083	118750	160417	202083	243750	51	000590
52	036111	077778	119444	161111	202778	244444	52	000602
53	036806	078472	120139	161806 162500	203472	245139	53	000613
54 55	0.038194	0,079861	0.121528	0.163194	204167 0.204861	245833 0.246528	54 55	0.000637
55 56	038889	080556	122222	163889	205556	247222	56	000648
- 57	039583	081250	122917	164583	206250	247917	57	000660
58	040278	081944	123611	165278	206944	248611	58	000671
59		0.082639	0.124306	0.165972	0.207639	0.249306	59	0.000683

	6 <sup>h</sup>	7 <sup>h</sup>	8h	o <sup>h</sup>	10p	IIh		
m	d ·	d	d	1 a	d	l d		đ
0	0.250000	0.291667	0.333333	0.375000	0.416667	0.458333	0	0,000000
I	250694	292361	334028	375694	417361	459028	1	000012
2	251389	293056	334722	376389	418056	459722	2	000023
3	252083	293750	335417	377083	418750	460417	3	000035
4	252778	294444	0.336806	377778	419444	461111	4	000046
5	0.253472 254167	295833	337500	0.378472 379167	0.420139 420833	462500	5 6	0.000058
7	254861	296528	337500	379861	421528	463194	7	000081
8	255556	297222	338889	380556	422222	463889	8	000093
9	256250	297917	339583	381250	422917	464583	9	000104
10	0.256944	0.298611	0.340278	0.381944	0.423611	0.465278	Io	0.000116
11	257639	299306	340972	382639	424306	465972	II	000127
12	258333	300000	341667	383333	425000	466667	12	000139
13	259028	300694	342361	384028	425694	467361	13	000150
14	259722	301389	343056	384722	426389	468056	14	000162
15	0.260417	0.302083	0.343750	0.385417	0.427083	0.468750	15	0.000174
16	261111	302778	344444	386111	427778	469444	16	000185
17	261806	303472	345139	386806	428472	470139	17	000197
18	262500	304167	345833	387500	429167	470833	18	000208
19	263194	304861	346528	388194	429861	471528	19	000220
20	0.263889	0.305556	0.347222	0.388889	0.430556	0.472222	20	0.000231
21	264583	306250	347917	389583	431250	472917	21	000243
22	265278	306944	348611	390278	431944	473611	22	000255
23	265972	307639 308333	349306	390972	432639	474306	23	000266
24	266667 0.267361	0.309028	350000	391667	433333	475000 0.475694	24	0.000289
25 26	268056	309722	351389	393056	434722	476389	26	000301
27	268750	310417	352083	393750	435417	477083	27	000313
28	269444	311111	352778	394444	436111	477778	28	000324
29	270139	311806	353472	395139	436806	478472	29	000336
30	0.270833	0.312500	0.354167	0.395833	0.437500	0.479167	30	0.000347
31	271528	313194	354861	396528	438194	479861	31	000359
32	272222	313889	355556	397222	438889	480556	32	000370
33	272917	314583	356250	397917	439583	481250	33	000382
34	273611	315278	356944	398611	440278	481944	34	000394
35	0.274306	0.315972	0.357639	0.399306	0.440972	0.482639	35	0.000405
36	275000	316667	358333	400000	441667	483333	36	000417
37	275694	317361	359028	400694	442361	484028	37	000428
38	276389	318056	359722	401389	443056	484722	38	000440
39	277083	318750	360417	402083	443750	485417	39	000451
40	0.277778	0.319444	0.361111	0.402778	0.444444	0.486111	40	0.000463
41	278472	320139	361806	403472	445139	486806	4 I	000475
42	279167 279861	320833	362500 363194	404167 404861	445833	487500	42	000486
43	280556	321528 322222	363889	405556	446528 447222	488194 488889	43	000498
44 45	0.281250	0.322917	0.364583	0.406250	0.447917	0.489583	44 45	0.000521
46	281944	323611	365278	406944	448611	490278	46	000532
47	282639	324306	365972	407639	449306	490972	47	000544
48	283333	325000	366667	408333	450000	491667	48	000556
49	284028	325694	367361	409028	450694	492361	49	000567
50	0.284722	0.326389	0.368056	0.409722	0.451389	0.493056	50	0.000579
51	285417	327083	368750	410417	452083	493750	51	000590
52	286111	327778	369444	411111	452778	494444	52	000602
53	286806	328472	370139	411806	453472	495139	53	000613
54	287500	329167	370833	412500	454167	495833	54	000625
55	0.288194	0.329861	0.371528	0.413194	0.454861	0.496528	55	0.000637
56	288889	330556	372222	413889	455556	497222	56	000648
57	289583	331250	372917	414583	456250	497917	57	000660
58	290278	331944	373611	415278	456944	498611	58	000671
59	0.290972	0.332639	0.374306	0.415972	0.457639	0.499306	59	0.000683

I. Anzahl der am o. Januar, 12<sup>h</sup> Welt-Zeit, seit Anfang der Periode verflossenen Tage

Jahr n. Chr.	0	100	200	300	400	500	600	700	800	900
	17	17	17	18	18	19	19	19	20	20
0	21057	57582	94107	30632	67157	03682	40207	76732	13257	49782
4	22518	59043	95568	32093	68618	05143	41668	78193	14718	51243
8	23979	60504	97029	33554	70079	06604	43129	79654	16179	52704
12	25440	61965	98490	35015	71540	08065	44590	81115	17640	54165
16	26901	63426	99951	36476	73001	09526	46051	82576	19101	55626
20	28362	64887	01412	37937	74462	10987	47512	84037	20562	57087
24	29823	66348	02873	39398	75923	12448	48973	85498	22023	58548
28	31284	67809	04334	40859	77384	13909	50434	86959	23484	60009
32	32745	69270	05795	42320	78845	15370	51895	88420	24945	61470
36	34206	70731	07256	43781	80306	16831	53356	89881	26406	62931
40	35667	72192	08717	45242	81767	18292	54817	91342	27867	64392
44	37128	73653	10178	46703	83228	19753	56278	92803	29328	65853
48	38589	75114	11639	48164	84689	21214	57739	94264	30789	67314
52	40050	76575	13100	49625	86150	22675	59200	95725	32250	68775
56	41511	78036	14561	51086	87611	24136	60661	97186	33711	70236
60	42972	79497	16022	52547	89072	25597	62122	98647	35172	71697
64	44433	80958	17483	54008	90533	27058	63583	80100	36633	73158
68	45894	82419	18944	55469	91994	28519	65044	01569	38094	74619
72	47355	83880	20405	56930	93455	29980	66505	03030	39555	76080
76	48816	85341	21866	58391	94916	31441	67966	04491	41016	77541
80	50277	86802	23327	59852	96377	32902	69427	05952	42477	79002
84	51738	88263	24788	61313	97838	34363	70888	07413	43938	80463
88	53199	89724	26249	62774	99299	35824	72349	08874	45399	81924
92	54660	91185	27710	64235	00760	37285	73810	10335	46860	83385
96	56121	92646	29171	65696	02221	38746	75271	11796	48321	84846
100	57582	94107	30632	67157	03682	40207	76732	13257	49782	86307
	17	17	18	18	19	19	19	20	20	20

Ia. Anzahl der am o. eines jeden Monats, 12<sup>h</sup> Welt-Zeit, seit Beginn der Schaltperiode verflossenen Tage

Jahr	Jan. o	Febr. o	März o	April 0	Mai o	Juni o	Juli o	Aug. o	Sept. o	Okt. o	Nov. o	Dez. o
0	o 366	31 397	60 425	91 456	121 486	152 517	182 547	213 578	244 609	274 639	305 670	335
3	731	762	790	821 1186	851	882 1247	912	943 1308	974	1369	1400	1065

I. Anzahl der am o. Januar, 12h Welt-Zeit, seit Anfang der Periode verflossenen Tage

Jahr n. Chr.	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900
	20	21	21	21	22	22	23	23	23	24
0	86307	22832	59357	95882	32407	68932	05447	419711)	784951)	150191
4	87768	24293	60818.	97343	33868	70393	06908	43432	79956	16480
8	89229	25754	62279	98804	35329	71854	08369	44893	81417	17941
12	90690	27215	63740	00265	36790	73315	09830	46354	82878	19402
16	92151	28676	65201	01726	38251	74776	11291	47815	84339	20863
20	93612	30137	66662	03187	39712	76237	12752	49276	85800	22324
24	95073	31598	68123	04648	41173	77698	14213	50737	87261	23785
28	96534	33059	69584	06109	42634	79159	15674	52198	88722	25246
32	97995	34520	71045	07570	44095	80620	17135	53659	90183	26707
36	99456	35981	72506	09031	45556	82081	18596	55120	91644	28168
40	00917	37442	73967	10492	47017	83542	20057	56581	93105	29629
44	02378	38903	75428	11953	48478	85003	21518	58042	94566	31090
48	03839	40364	76889	13414	49939	86464	22979	59503	96027	32551
52	05300	41825	78350	14875	51400	87925	24440	60964	97488	34012
56	06761	43286	79811	16336	52861	89386	25901	62425	98949	35473
60	08222	44747	81272	17797	54322	90847	27362	63886	00410	36934
64	09683	46208	82733	19258	55783	92308	28823	65347	01871	38395
68	11144	47669	84194	20719	57244	93769	30284	66808	03332	39856
72	12605	49130	85655	22180	58705	95230	31745	68269	04793	41317
76	14066	50591	87116	23641	60166	96691	33206	69730	06254	42778
80	15527	52052	88577	25102	61627	98152	34667	71191	07715	44239
84	16988	53513	90038	26563	63088	99603	36128	72652	09176	45700
88	18449	54974	91499	28024	64549	01064	37589	74113	10637	47161
92	19910	56435	92960	29485	66010	02525	39050	75574	12098	48622
96	21371	57896	94421	30946	67471	03986	40511	77035	13559	50083
100	22832	59357	95882	32407	68932	05447	419711)	78495¹)	150191)	51544
	21	21	21	22	22	23	23	23	24	24

<sup>1)</sup> Die Zahlen geben die am -r. Jan. seit Anfang der Periode verflossenen Tage.

Ia. Anzahl der am o. eines jeden Monats, 12<sup>h</sup> Welt-Zeit, seit Beginn der Schaltperiode verflossenen Tage

Jahr	Jan. o	Febr. o	März o	April o	Mai o	Juni o	Juli o	Aug. o	Sept. o	Okt. o	Nov. o	Dez. o
0	O <sup>2</sup> )	312)	60	91	121	152	182	213	244	274	305	335
1	366	397	425	456	486	517	547	578	609	639	670	700
2	731	762	790	821	851	882	912	943	974	1004	1035	1065
3	1096	1127	1155	1186	1216	1247	1277	1308	1339	1369	1400	1430

Von 1582 Okt. 15 bis 1583 Dez. 31 sind die Zahlen der Tafel Ia um 10 zu verkleinern.

<sup>2)</sup> In den Jahren 1700, 1800, 1900 um 1 zu vergrößern.

#### Julianische Periode

II. Anzahl der am o. eines jeden Monats,  $12^{\rm h}$  Welt-Zeit, seit Beginn der Periode verflossenen Tage

Jahr n. Chr.	Januar o	Febr. o März o	April o	Mai o	Juni o	Juli o	Aug. o	Sept. o	Okt. o	Nov. o	Dez. o
1860 1861 1862 1863 1864	776 2401 141 506	441 470 807 835 172 200 537 565 902 931	501 866 231 596 962	531 896 261 626 992	562 927 292 657 *023	592 957 322 687 *053	623 988 353 718 *084	654 *019 384 749 *115	684 *049 414 779 *145	445 810	745 *110 475 840 *206
1865 1866 1867 1868 1869	2402 237 602 967 2403 332 698	268 296 633 661 998 *026' 363 392 729 757	327 692 *057 423 788	357 722 *087 453 818	388 753 *118 484 849	783 *148 514 879	449 814 *179 545 910	480 845 *210 576 941	510 875 *240 606 971	637	571 936 *301 667 *032
1870 1871 1872 1873 1874	428	094 122 459 487 824 853 190 218 555 583	153 518 884 249 614	183 548 914 279 644	214 579 945 310 675	244 609 975 340 705	275 640 *006 371 736	306 671 *037 402 767	336 701 *067 432 797	367 732 *098 463 828	397 762 *128 493 858
1875 1876 1877 1878 1879	2406 254 620	920 948 285 314 651 679 6016 *044 381 409	979 345 710 *075 440	*009 375 740 *105 470	*040 406 771 *136 501	*070 436 801 *166 531	467 832	*132 498 863 *228 593	*162 528 893 *258 623	*193 559 924 *289 654	589 954
1880 1881 1882 1883 1884	715 2408 081 446 811 2409 176	746 775 112 140 477 505 842 870 207 236	806 171 536 901 267	836 201 566 931 297	867 232 597 962 328	897 262 627 992 358	928 293 658	959 324 689 *054 420	989 354 719 *084 450	385 750	*050 415 780 *145 511
1885 1886 1887 1888 1889	2410 272 637	573 601 938 966 303 331 668 697 034 062	632 997 362 728 993	662 *027 392 758 123	693 *058 423 789 154	723 *088 453 819 184	754 *119 484 850 215	785 *150 515 881 246	815 *180 545 911 276	846 *211 576 942 307	876 *241 606 972 337
1890 1891 1892 1893 1894	368 733 2412 098 464	399 427 764 792 129 158 495 523 860 888	458 823 189 554 919	488 853 219 584 949	519 884 250 615 980	549 914 280 645 *010	580 945 311 676	611 976 342 707 *072	641 *006 372 737 *102	672	702 *067 433 798 *163
1895 1896 1897 1898 1899	2413 194 559 925 2414 290 655	225 253 590 619 956 984 321 349 686 714	284 650 *015 380 745	314 680 *045 410 775	345 711 *076 441 806	375 741 *106 471 836	406 772 *137 502 867	437 803 *168 533 898	467 833 *198 563 928	498 864 *229 594 959	528 894 *259 624 989

#### Julianische Periode

II. Anzahl der am o. eines jeden Monats,  $12^{\rm h}$  Welt-Zeit, seit Beginn der Periode verflossenen Tage

Jahr n. Chr.	Januar o	Febr. o März o	April o	Mai o	Juni o	Julio	Aug. o	Sept. o	Okt. o Nov. o Dez. o
1900 1901 1902 1903	2415 020 385 750 2416 115 480	051 079 416 444 781 809 146 174 511 540	110 475 840 205 571	505 870 235	171 536 901 266 632	201 566 931 296 662	232 597 962 327 693	263 628 993 358 724	293 324 354 658 689 719 *023 *054 *084 388 419 449 754 785 815
1905 1906 1907 1908	846 2417 211 576 941 2418 307	877 905 242 270 607 635 972 *001 338 366	936 301 666 *032 397	331 696 *062	997 362 727 *093 458	*027 392 757 *123 488	*058 423 788 *154 519	*089 454 819 *185 550	*119 *150 *180 484 515 545 849 880 910 *215 *246 *276 580 611 641
1910 1911 1912 1913	672 2419 037 402 768 2420 133	703 731 068 096 433 462 799 827 164 192	762 127 493 858 223	157 523 888	823 188 554 919 284	853 218 584 949 314	884 249 615 980 345	915 280 646 *011 376	945 976 *006 310 341 371 676 707 737 *041 *072 *102 406 437 467
1915 1916 1917 1918	498 863 2421 229 594 959	529 557 894 923 260 288 625 653 990 *018	588 954 319 684 *049	984 349 714	649 *015 380 745 *110	679 *045 410 775 *140	710 *076 441 806 *171	741 *107 472 837 *202	771 802 832 *137 *168 *198 502 533 563 867 898 928 *232 *263 *293
1920 1921 1922 1923 1924	2422 324 690 2423 055 420 785	355 384 721 749 086 114 451 479 816 845	415 780 145 510 876	810 175 540	476 841 206 571 937	506 871 236 601 967	537 902 267 632 998	568 933 298 663 *029	598 629 659 963 994 *024 328 359 389 693 724 754 *059 *090 *120
1925 1926 1927 1928	2424 151 516 881 2425 246 612	182 210 547 575 912 940 277 306 643 671	241 606 971 337 702	636	302 667 *032 398 763	332 697 *062 428 793	363 728 *093 459 824	394 759 *124 490 855	424 455 485 789 820 850 *154 *185 *215 520 551 581 885 916 946
1930 1931 1932 1933 1934	977 2426 342 707 2427 073 438	*008 *036 373 401 738 767 104 132 469 497	*067 432 798 163 528	*097 462 828 193 558	*128 493 859 224 589	*158 523 889 254 619	*189 554 920 285 650	*220 585 951 316 681	*250 *281 *311 615 646 676 981 *012 *042 346 377 407 711 742 772
1935 1936 1937 1938 1939	803 2428 168 534 899 2429 264	834 862 199 228 565 593 930 958 295 323	893 259 624 989 354	923 289 654 *019 384	954 320 685 *050 415	984 350 715 *080 445	*015 381 746 *111 476	*046 412 777 *142 507	*076 *107 *137 442 473 503 807 838 868 *172 *203 *233 537 568 598

#### Julianische Periode

II. Anzahl der am o. eines jeden Monats,  $12^{\rm h}$  Welt-Zeit, seit Beginn der Periode verflossenen Tage

Jahr n. Chr.	Januar o	Febr. o Mirz o	April o	Mai o Juni o	Juli o	Sept. o	Okt. o Nov. o Dez. o
1940 1941 1942 1943	2429 629 995 2430 360 725 2431 090	660 689 *026 *054 391 419 756 784 121 150	*085 *: 450 815	750 781 115 *146 480 511 845 876 211 242	811 842 *176 *207 541 572 906 937 272 303	873 *238 603 968 334	903 934 964 *268 *299 *329 633 664 694 998 *029 *059 364 395 425
1945 1946 1947 1948	456 821 2432 186 551 917	487 515 852 880 217 245 582 611 948 976	911 276 642	576 607 941 972 306 337 672 703 037 *068	637 668 *002 *033 367 398 733 764 *098 *129	699 *064 429 795 *160	729 760 790 *094 *125 *155 459 490 520 825 856 886 *190 *221 *251
1950 1951 1952 1953 1954	2433 282 647 2434 012 378 743	313 341 678 706 043 072 409 437 774 802	737 103 468	402 433 767 798 133 164 498 529 863 894	463 494 828 859 194 225 559 590 924 955	525 890 256 621 986	555 586 616 920 951 981 286 317 347 651 682 712 *016 *047 *077
1955 1956 1957 1958 1959	2435 108 473 839 2436 204 569	139 167 504 533 870 898 235 263 600 628	564 929 294	228 259 594 625 959 990 324 355 689 720	289 320 655 686 *020 *051 385 416 750 781	717	381 412 442 747 778 808 *112 *143 *173 477 508 538 842 873 903
1960 1961 1962 1963 1964	934 2437 300 665 2438 030 395	965 994 331 359 696 724 061 089 426 455	390	055 *086 420 451 785 816 150 181 516 547	*116 *147 481 512 846 877 211 242 577 608	543 908 273	*208 *239 *269 573 604 634 938 969 999 303 334 364 669 700 730
1965 1966 1967 1968 1969	761 2439 126 491 856 2440 222	792 820 157 185 522 550 887 916 253 281	216 581	881 912 246 277 611 642 977 *008 342 373	942 973 307 338 672 703 *038 *069 403 434	369 734 *100	*034 *065 *095 399 430 460 764 795 825 *130 *161 *191 495 526 556
1970 1971 1972 1973 1974	587 952 2441 317 683 2442 048	618 646 983 *011 348 377 714 742 079 107	408	707 738 6072 *103 438 469 803 834 168 199	768 799 *133 *164 499 530 864 895 229 260	*195 561 926	860 891 921 *225 *256 *286 591 622 652 956 987 *017 321 352 382
1975 1976 1977 1978 1979	413 778 2443 144 509 2443 874	444 472 809 838 175 203 540 568 905 933	503 869 234 599 964	533 564 899 930 264 295 629 660 994 *025	594 625 960 991 325 356 690 721 *055 *086	*022 387	686 717 747 *052 *083 *113 417 448 478 782 813 843 *147 *178 *208

						c)	
0 0.0	0.000	3 0.0	0.050	0.000	0.00000	1.800	0.00050
3.6	OI	3.6	51	036	OI	836	51
7.2	02	7.2	52	072	02	872	52
10.8	03	10.8	53	108	03	908	53
14.4	04	14.4	54	144	04	944	54
o 18.0	0.005	3 18.0	0.055	0.180	0.00005	1.980	0.00055
21.6	06	21.6	56	216	06	2.016	56
25.2	07	25.2	57	252	07	052	57
28.8	08	28.8	58	288	08	088	58
32.4	09	32.4	59	324	09	124	59
0 36.0	0.010	3 36.0	0.060	0.360	0.00010	2.160	0.00060
39.6	II	39.6	61	396	II	196	61
43.2	12	43.2	62	432	12	232	62
46.8	13	46.8	63	468	13	268	63
50.4	14	50.4	64	504	14	304	64
54.0	0.015	54.0	0.065	0.540	0.00015	2.340	0.00065
0 57.6	16	3 57.6	66	576	16	376	66
I I.2	17	4 I.2	67	612	17	412	67
4.8	18	4.8	68	648	18	448	68
8.4	19	8.4	69	684		484	69
I 12.0	0.020	4 12.0	0.070	0.720	0.00020	2.520	0.00070
15.6	21	15.6	71	756	21	556	71
	22	19.2	72		22	592	72
19.2 22.8		22.8		792 828		628	
26.4	23	26.4	73	864	23	664	73
	24	4 30.0	74		24		74
1 30.0	0.025 26	33.6	0.075	0.900	0.00025 26	736	0.00075
33.6			76	936			76
37·2 40.8	27 28	37.2 40.8	77 78	0.972 1.008	27 28	772 808	77 78
44.4		44.4	-			844	79
I 48.0	29	4 48.0	79 o.o8o	044 1.080	29	2.880	0.00080
51.6	0.030	51.6	81	1.000	0.00030	916	81
-	31	_	82		31	952	82
55.2 1 58.8	32	55·2 4 58.8	83	152 188	32	2.988	83
2 2.4	33		84	224	33	3.024	84
6.0	34	5 2.4 6.0	0.085	1.260	34	060	0.00085
9.6	0.035	9.6	86		0.00035		86
	36	_	87	296	36	096	87
13.2	37 38	13.2 16.8	88	33 <sup>2</sup> 368	37 38	132	88
		20.4	89			204	89
20.4	39			404	39 0.00040		
_	0.040	5 24.0 27.6	0.090	1.440			0.00090
27.6	41		91	476	41	276	91
31.2 34.8	42	31.2 34.8	92	512	42	312 348	92
	43		93	548	43		93
38.4 2 42.0	44	38.4	94	584	44	384	94
	0.045	5 42.0	0.095	1.620	0.00045		0.00095
	46		96	656		456	
49.2 52.8	47 48	49.2	97	692	47	492	
	-	52.8	98	728	48	528	98
2 56.4	49	5 56.4	99	764	49	564	99
3 0.0	0.050	6 0.0	0.100	1.800	0.00050	3.600	0.00100

	8 9	+30°	+32°	+34°	+36°	+38°	+40°	+42°	+44°	+46°	+48°	-+50°
29 4 48.6   4 43.2   4 35.6   4 28.6   4 21.1   4 15.0   4 43.3   54.9   3 44.5   3 33.0   2 20.1   28 4 51.7   4 45.7   4 45.0   4 42.9   4 36.5   4 29.5   4 12.5   4 14.7   4 6.2   3 57.0   3 46.1   3 35.5   26 4 57.7   4 52.2   4 46.5   4 44.5   4 43.3   4 23.1   4 12.5   4 14.7   4 6.2   3 57.0   3 46.1   3 33.4   3 35.5   25 5 0.6   4 55.4   4 49.9   4 44.2   4 38.0   4 31.5   4 24.5   4 16.9   4 8.7   3 59.7   3 40.7   22 5 3 0.6   4 55.4   4 49.9   4 44.2   4 38.0   4 31.5   4 24.5   4 16.9   4 8.7   3 59.7   3 40.7   22 5 3 0.6   4 55.4   4 49.9   4 44.2   4 38.0   4 31.5   4 24.5   4 16.9   4 8.7   3 59.7   3 40.7   22 5 3 0.6   4 55.4   4 49.9   4 42.0   4 43.8   4 27.0   4 19.7   4 11.4   4 5.0   23 5 11.7   5 7.5   5 3.1   4 58.4   4 55.5   4 44.2   4 38.3   4 27.0   4 10.7   4 11.8   3 5.3   23 5 11.7   5 7.5   5 3.1   4 58.4   4 55.5   4 48.3   4 47.0   4 41.3   4 35.3   4 28.7   4 15.4   22 5 7 5 7 5   5 3.1   4 58.4   4 55.5   5 0.8   4 50.2   4 51.2   4 45.9   4 40.2   4 30.3   4 27.0   4 41.3   4 35.3   4 28.7   4 31.4   23 5 1 1.7   5 7.5   5 3.3   5 12.4   5 8.5   5 0.8   4 50.2   4 51.2   4 45.9   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4 40.5   4			h m				h m	h m				h m
28	_									1		-
26   4   57.7   4   52.2   4   40.5   5   40.4   4   33.9   4   27.1   4   19.7   4   11.7   4   30. 3   33.4   3   42.8   24   5   3.5   4   58.5   4   58.5   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   38.6   4   3												
25		4 54.7							1 '		3 46.9	3 35.5
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22   5   9.0   5   4.6   4   59.9   4   59.0   4   49.7   4   44.2   4   38.3   4   41.9   4   45.0   4   41.7   5   4   93.4   4   15.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4   50.4												
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14       6 35.9       6 38.7       6 41.7       6 44.8       6 48.0       6 51.5       6 55.2       6 59.2       7 3.4       7 8.0       7 13.1         15       6 38.4       6 41.4       6 44.6       6 47.9       6 51.5       6 55.2       6 59.2       7 3.5       7 8.1       7 13.0       7 18.5         16       6 41.0       6 44.2       6 47.6       6 51.2       6 54.9       6 58.9       7 3.2       7 7.8       7 12.7       7 18.1       7 23.9         17       6 43.5       6 47.0       6 50.6       6 54.4       6 58.5       7 2.7       7 7.3       7 12.2       7 17.5       7 23.3       7 29.5         18       6 46.1       6 49.8       6 53.7       6 57.7       7 2.0       7 6.6       7 11.5       7 16.7       7 22.4       7 28.5       7 35.3         19       6 48.8       6 52.7       6 56.8       7 1.1       7 5.7       7 10.5       7 15.7       7 21.3       7 27.4       7 33.9       7 41.1         20       6 51.5       6 55.6       6 59.9       7 4.5       7 9.4       7 14.5       7 20.1       7 26.0       7 37.4       7 33.4       7 47.1         +21       6 54.2       6 58.6       7 3.1				25.7				-	1	1	0 0	
15       6 38.4       6 41.4       6 44.6       6 47.9       6 51.5       6 55.2       6 59.2       7 3.5       7 8.1       7 13.0       7 18.5         16       6 41.0       6 44.2       6 47.6       6 51.2       6 54.9       6 58.9       7 3.2       7 7.8       7 12.7       7 18.1       7 23.9         17       6 43.5       6 47.0       6 50.6       6 54.4       6 58.5       7 2.7       7 7.3       7 12.2       7 17.5       7 23.3       7 29.5         18       6 46.1       6 49.8       6 53.7       6 57.7       7 2.0       7 6.6       7 11.5       7 22.4       7 28.5       7 35.3         19       6 48.8       6 52.7       6 56.8       7 1.1       7 5.7       7 10.5       7 15.7       7 21.3       7 27.4       7 33.9       7 41.1         20       6 51.5       6 55.6       6 59.9       7 4.5       7 9.4       7 14.5       7 20.1       7 26.0       7 32.4       7 39.9       7 41.1         +21       6 54.2       6 58.6       7 3.1       7 8.0       7 13.1       7 18.6       7 24.5       7 30.8       7 37.4       7 39.9       7 45.1         22       6 59.9       7 1.6       7 6.4       7 11.5	-	1 , 33 .			. ' '.			1 2 3	1 , " ' '	-		
16       6       41.0       6       44.2       6       47.6       6       51.2       6       54.9       6       58.9       7       3.2       7       7.8       7       12.7       7       18.1       7       23.9         17       6       43.5       6       47.0       6       56.6       6       54.4       6       58.5       7       2.7       7       7.3       7       12.2       7       17.5       7       23.3       7       29.5         18       6       46.1       6       49.8       6       53.7       6       57.7       7       2.0       7       6.6       7       11.5       7       16.7       7       22.4       7       28.5       7       35.3         20       6       51.5       6       55.6       6       59.9       7       4.5       7       9.4       7       14.5       7       20.1       7       26.0       7       33.9       7       41.1         421       6       54.2       6       58.6       7       3.1       7       8.0       7       13.1       7       18.6       7       24.5       7		000		1 - 7	4 111			1 2 3 3	1 2/			
17       6       43.5       6       47.0       6       50.6       6       54.4       6       58.5       7       2.7       7       7.3       7       12.2       7       17.5       7       23.3       7       29.5         18       6       46.1       6       49.8       6       53.7       6       57.7       7       10.5       7       11.5       7       16.7       7       22.4       7       28.5       7       35.3         19       6       48.8       6       52.7       6       56.8       7       1.1       7       5.7       7       10.5       7       11.5       7       21.3       7       22.4       7       23.9       7       41.1       20.6       6       51.5       6       55.6       6       59.9       7       4.5       7       9.4       7       14.5       7       20.1       7       26.0       7       33.9       7       41.1         +21       6       54.2       6       58.6       7       3.1       7       8.0       7       13.1       7       18.6       7       24.5       7       30.8       7       36.1 </td <td></td> <td></td> <td>6 44.2</td> <td></td> <td>1/-7</td> <td></td> <td>6 58.9</td> <td>37</td> <td></td> <td>,</td> <td>7 18.1</td> <td></td>			6 44.2		1/-7		6 58.9	37		,	7 18.1	
18       6 46.1       6 49.8       6 53.7       6 57.7       7 2.0       7 6.6       7 11.5       7 16.7       7 22.4       7 28.5       7 35.3         19       6 48.8       6 52.7       6 56.8       7 1.1       7 5.7       7 10.5       7 15.7       7 21.3       7 27.4       7 33.9       7 41.1         20       6 51.5       6 55.6       6 59.9       7 4.5       7 9.4       7 14.5       7 20.1       7 26.0       7 32.4       7 39.4       7 47.1         +21       6 54.2       6 58.6       7 3.1       7 8.0       7 13.1       7 18.6       7 24.5       7 30.8       7 37.6       7 45.1       7 53.3         22       6 56.9       7 1.6       7 6.4       7 11.5       7 17.0       7 22.8       7 29.0       7 35.7       7 42.9       7 50.9       7 59.6         23       6 59.8       7 4.6       7 9.7       7 15.1       7 20.9       7 27.0       7 33.6       7 45.7       7 42.9       7 50.9       7 50.9       7 59.6         24       7 2.6       7 7.7       7 13.1       7 18.8       7 24.9       7 31.3       7 45.8       7 54.0       8 2.9       8 12.9         25       7 5.6       7 10.9       7 16.6			6 47.0	6 50.6	6 54.4		7 2.7	7 7.3	7 12.2		7 23.3	7 29.5
20         6         51.5         6         55.6         6         59.9         7         4.5         7         9.4         7         14.5         7         20.1         7         26.0         7         32.4         7         39.4         7         47.1           +21         6         54.2         6         58.6         7         3.1         7         8.0         7         13.1         7         18.6         7         24.5         7         30.8         7         37.6         7         45.1         7         53.3           22         6         56.9         7         1.6         7         6.4         7         11.5         7         17.0         7         22.8         7         29.0         7         35.7         7         42.9         7         50.9         7         59.6         20.0         7         33.6         7         40.7         7         48.4         7         56.8         8         6.1           24         7         2.6         7         7.7         7         13.1         7         18.8         7         24.9         7         34.8         7         54.0         8         2.9			6 49.8		6 57.7							
+21 6 54.2 6 58.6 7 3.1 7 8.0 7 13.1 7 18.6 7 24.5 7 30.8 7 37.6 7 45.1 7 53.3 22 6 56.9 7 1.6 7 6.4 7 11.5 7 17.0 7 22.8 7 29.0 7 35.7 7 42.9 7 50.9 7 59.6 23 6 59.8 7 4.6 7 9.7 7 15.1 7 20.9 7 27.0 7 33.6 7 40.7 7 48.4 7 56.8 8 6.1 24 7 2.6 7 7.7 7 13.1 7 18.8 7 24.9 7 31.3 7 38.3 7 45.8 7 54.0 8 2.9 8 12.9 25 7 5.6 7 10.9 7 16.6 7 22.6 7 29.0 7 35.8 7 43.1 7 51.1 7 59.8 8 9.3 8 19.9 26 7 8.5 7 14.2 7 20.1 7 26.4 7 33.2 7 40.4 7 48.1 7 56.5 8 5.7 8 15.8 8 27.1 27 7 11.6 7 17.5 7 23.8 7 30.4 7 37.5 7 45.0 7 53.2 8 2.1 8 11.8 8 22.6 8 34.7 28 7 14.7 7 20.9 7 27.5 7 34.4 7 41.9 7 49.9 7 58.5 8 7.9 8 18.2 8 29.7 8 42.6 29 7 17.9 7 24.4 7 31.3 7 38.6 7 46.4 7 54.8 8 3.9 8 13.9 8 24.8 8 37.1 8 51.0		1										
22       6 56.9       7 1.6       7 6.4       7 11.5       7 17.0       7 22.8       7 29.0       7 35.7       7 42.9       7 50.9       7 59.6         23       6 59.8       7 4.6       7 9.7       7 15.1       7 20.9       7 27.0       7 33.6       7 40.7       7 48.4       7 56.8       8 6.1         24       7 2.6       7 7.7       7 13.1       7 18.8       7 24.9       7 31.3       7 38.3       7 45.8       7 54.0       8 2.9       8 12.9         25       7 5.6       7 10.9       7 16.6       7 22.6       7 29.0       7 35.8       7 43.1       7 51.1       7 59.8       8 9.3       8 19.9         26       7 8.5       7 14.2       7 20.1       7 26.4       7 37.2       7 40.4       7 48.1       7 56.5       8 5.7       8 15.8       8 27.1         27       7 11.6       7 17.5       7 23.8       7 30.4       7 37.5       7 45.0       7 53.2       8 2.1       8 11.8       8 22.6       8 34.7         28       7 14.7       7 20.9       7 27.5       7 34.4       7 41.9       7 49.9       7 58.5       8 7.9       8 18.2       8 29.7       8 42.6         29       7 17.9       7 24.4       7 31.3				1								
23   6 59.8   7 4.6   7 9.7   7 15.1   7 20.9   7 27.0   7 33.6   7 40.7   7 48.4   7 56.8   8 6.1   24   7 2.6   7 7.7   7 13.1   7 18.8   7 24.9   7 31.3   7 38.3   7 45.8   7 54.0   8 2.9   8 12.9   25   7 5.6   7 10.9   7 16.6   7 22.6   7 29.0   7 35.8   7 43.1   7 51.1   7 59.8   8 9.3   8 19.9   26   7 8.5   7 14.2   7 20.1   7 26.4   7 33.2   7 40.4   7 48.1   7 56.5   8 5.7   8 15.8   8 27.1   27   7 11.6   7 17.5   7 23.8   7 30.4   7 37.5   7 45.0   7 53.2   8 2.1   8 11.8   8 22.6   8 34.7   28   7 14.7   7 20.9   7 27.5   7 34.4   7 41.9   7 49.9   7 58.5   8 7.9   8 18.2   8 29.7   8 42.6   29   7 17.9   7 24.4   7 31.3   7 38.6   7 46.4   7 54.8   8 3.9   8 13.9   8 24.8   8 37.1   8 51.0												
24       7       2.6       7       7.7       7       13.1       7       18.8       7       24.9       7       31.3       7       38.3       7       45.8       7       54.0       8       2.9       8       12.9         25       7       5.6       7       10.9       7       16.6       7       22.6       7       29.0       7       35.8       7       43.1       7       51.1       7       59.8       8       9.3       8       19.9         26       7       8.5       7       14.2       7       20.1       7       26.4       7       33.2       7       40.4       7       48.1       7       56.5       8       5.7       8       15.8       8       27.1         27       7       11.6       7       17.5       7       23.8       7       37.5       7       45.0       7       53.2       8       2.1       8       11.8       8       22.6       8       34.7         28       7       14.7       7       20.9       7       27.5       7       34.4       7       41.9       7       49.9       7       58.5       8				1				7 33.6				
26 7 8.5 7 14.2 7 20.1 7 26.4 7 33.2 7 40.4 7 48.1 7 56.5 8 5.7 8 15.8 8 27.1 27 7 11.6 7 17.5 7 23.8 7 30.4 7 37.5 7 45.0 7 53.2 8 2.1 8 11.8 8 22.6 8 34.7 28 7 14.7 7 20.9 7 27.5 7 34.4 7 41.9 7 49.9 7 58.5 8 7.9 8 18.2 8 29.7 8 42.6 29 7 17.9 7 24.4 7 31.3 7 38.6 7 46.4 7 54.8 8 3.9 8 13.9 8 24.8 8 37.1 8 51.0	24	7 2.6	7 7.7	7 13.1	7 18.8	7 24.9	7 31.3	7 38.3	7 45.8	7 54.0	8 2.9	8 12.9
27     7     11.6     7     17.5     7     23.8     7     30.4     7     37.5     7     45.0     7     53.2     8     2.1     8     11.8     8     22.6     8     34.7       28     7     14.7     7     20.9     7     27.5     7     34.4     7     41.9     7     49.9     7     58.5     8     7.9     8     18.2     8     29.7     8     42.6       29     7     17.9     7     24.4     7     31.3     7     38.6     7     46.4     7     54.8     8     3.9     8     13.9     8     24.8     8     37.1     8     51.0				1	'						1.0	, ,
28 7 14.7 7 20.9 7 27.5 7 34.4 7 41.9 7 49.9 7 58.5 8 7.9 8 18.2 8 29.7 8 42.6 29 7 17.9 7 24.4 7 31.3 7 38.6 7 46.4 7 54.8 8 3.9 8 13.9 8 24.8 8 37.1 8 51.0				·					1	J ,		,
29 7 17.9 7 24.4 7 31.3 7 38.6 7 46.4 7 54.8 8 3.9 8 13.9 8 24.8 8 37.1 8 51.0				1					_		_	5.,
									, ,			
		7 21.2							_			

δφ	+5°°	+51°	+52°	+53°	+54°	+55°	+56°	+57°	+58°	+59°	+-60°
-3°	h m 3 11.8	h m 3 4.1	h m 2 55.8	h m 2 46.8	h m 2 36.9	h m 2 25.9	h m 2 13.5	h m I 59.3	h m	h m	ъ m
29	3 20.1	3 12.9	3 5.3	2 57.0	2 48.0	2 38.1	2 27.1	2 14.7	2 0.4	I 43.4	1 21.9
28	3 28.0	3 21.3	3 14.2	3 6.6	2 58.3	2 49.3	2 39.4	2 28.4	2 15.9	2 1.6	I 44.5
27	3 35.5	3 29.3	3 22.7	3 15.7	3 8.0	2 59.8	2 50.8	2 40.8	2 29.8	2 17.3	2 2.9
26	3 42.8	3 37.0	3 30.8	3 24.2	3 17.2	3 9.6	3 1.4	2 52.4	2 42.4	2 31.3	2 18.8
25	3 49.7	3 44.3	3 38.6	3 32.4	3 25.9	3 18.9	3 11.3	3 3.1	2 54.1	2 44.1	2 33.0
24	3 56.5	3 51.4	3 46.0	3 40.3	3 34-3	3 27.8	3 20.8	3 13.2	3 5.0	2 56.0	2 46.0
23	4 3.0	3 58.2	3 53.2	3 47.9	3 42.3	3 36.2	3 29.8	3 22.8	3 15.3	3 7.1	2 58.0
22	4 9.3	4 4.9	4 0.2	3 55.2	3 50.0	3 44.3	3 38.4	3 31.9	3 25.0	3 17.5	3 9.3
21	4 15.4	4 11.3	4 6.9	4 2.3	3 57.4	3 52.2	3 46.6	3 40.7	3 34.3	3 27.4	3 19.9
-20	4 21.4	4 17.5	4 13.5	4 9.1	4 4.6	3 59.8	3 54.6	3 49.1	3 43.2	3 36.9	3 30.0
19	4 27.3	4 23.7	4 19.9	4 15.8	4 11.6	4 7.1	4 2.3	3 57.2	3 51.8	3 45.9	3 39.6
18	4 33.0	4 29.6	4 26.I	4 22.3	4 18.4	4 14.2	4 9.8	4 5.1	4 0.1	3 54.7	3 48.9
17	4 38.6	4 35.4	4 32.1	4 28.7	4 25.0	4 21.1	4 17.0	4 12.7	4 8.1	4 3.1	3 57.8
16	4 44.1	4 41.2	4 38.1	4 34.9	4 31.5	4 27.9	4 24.1	4 20.1	4 15.9	4 11.3	4 6.4
15	4 49.5	4 46.8	4 43.9	4 41.0	4 37.8	4 34.5	4 31.0	4 27.4	4 23.4	4 19.3	4 14.8
14	4 54.8	4 52.3	4 49.7		4 44.1	4 41.0	4 37.8	4 34.4	4 30.8	4 27.0	4 22.9
13	5 0.0	4 57.7	4 55·3 5 0.9	4 52.8	4 50.2 4 56.2	4 47.4	4 44.5	4 41.4	4 38.1	4 34.6	4 30.9
II	5 5.I 5 IO.2	5 3.0	5 6.4	5 4.3	5 2.1	4 53.7 4 59.8	4 51.0	4 54.9	4 52.2	4 42.0	4 46.3
				-			1		1		
-10	5 15.2	5 13.5 5 18.7	,	5 9.9 5 15.5	5 7.9	5 5.9	5 3.7 5 10.0	5 1.5	4 59.1 5 5.8		4 53.8 5 1.2
9	5 20.2 5 25.I	,	5 17.1 5 22.4	5 15.5	5 13.7	5 17.9	5 10.0	5 8.0	5 5.8	5 3.6	5 8.5
7	5 25.1	5 23.8 5 28.9	5 27.7	5 26.4	5 25.1	5 23.8	5 22.3	5 20.8	5 19.2	5 17.5	5 15.7
6	5 34.9	5 33.9	5 32.9	5 31.8	5 30.7	5 29.6	5 28.4	5 27.1	5 25.7	5 24.3	5 22.8
5	5 39.7	5 38.9	5 38.1	5 37.2	5 36.3	5 35.4	5 34.4	5 33.4	5 32.2	5 31.1	5 29.9
4	5 44.5	5 43.9	5 43.3	5 42.6	5 41.9	5 41.2	5 40.4	5 39.6	5 38.7	5 37.8	5 36.9
3	5 49.3	5 48.9	5 48.4	5 47.9	5 47.4	5 46.9	5 46.3	5 45.8	5 45.2	5 44-5	5 43.8
2	5 54.1	5 53.8	5 53.5	5 53.3	5 52.9	5 52.6	5 52.3	5 52.0	5 51.6	5 51.2	5 50.8
— т	5 58.9	5 58.8	5 58.7	5 58.6	5 58.4	5 58.3	5 58.2	5 58.1	5 58.0	5 57.9	5 57.7
0	6 3.6	6 3.7	6 3.8	6 3.9	6 4.0	6 4.1	6 4.2	6 4.3	6 4.4	6 4.5	6 4.7
+ 1	6 8.4	6 8.6	6 8.9	6 9.2	6 9.5	6 9.8	6 10.1	6 10.4	6 10.8	6 11.2	6 11.6
2	6 13.2	6 13.6	6 14.0	6 14.5	6 15.0	6 15.5	6 16.0	6 16.6	6 17.2	6 17.8	6 18.5
3	6 18.0	6 18.6	6 19.2	6 19.8	6 20.5	6 21.2	6 22.0	6 22.8	6 23.6	6 24.6	6 25.5
4	6 22.8	6 23.5	6 24.4	6 25.2	6 26.1	6 27.0	6 28.0	6 29.0	6 30.1	6 31.3	6 32.5
5	6 27.6	6 28.6	6 29.6	6 30.6	6 31.7	6 32.8	6 34.0	6 35.3	6 36.6	6 38.1	6 39.6
6	6 32.5	6 33.6	6 34.8	6 36.0	6 37.3	6 38.7	6 40.1	6 41.6	6 43.2	6 44.9	6 46.7
7	6 37.4	6 38.7	6 40.0	6 41.5	6 43.0	6 44.6	6 46.2	6 48.0	6 49.8	6 51.8	6 53.9
8	6 42.3	6 43.8	6 45.3	6 47.0	6 48.7	6 50.5	6 52.4	6 54.4	6 56.5	6 58.8	7 1.2
9	6 47.3	6 48.9	6 50.7	6 52.6	6 54.5	6 56.5	6 58.7	7 0.9	7 3.3	7 5.9	7 8.6
10	6 52.3	6 54.1	1 .		7 0.3	7 2.6	7 5.0	7 7.5	7 10.2	7 13.1	
+11	6 57.4	6 59.4	7 1.6	7 3.9	7 6.3	7 8.8	7 11.4	7 14.2	7 17.2	7 20.4	7 23.8
12	7 2.5	7 4.8	7 7.2	7 9.7	7 12.3	7 15.1	7 18.0	7 21.1	7 24.3	7 27.8	7 31.5
13	7 7.8	7 10.2	7 12.8	7 15.5	7 18.4	7 21.4	7 24.6	'	7 31.6	7 35.4	7 39.5
14	7 13.1	7 21.4	7 24.4	7 21.5	7 24.6	7 27.9	7 31.4	7 35.1	7 39.0	7 51.2	7 47.7
16	7 23.9	7 27.1	7 30.4	7 33.8	7 37.5	7 41.4	7 45.4	7 49.8	7 54.4	7 59.4	8 4.7
17	7 29.5	7 32.9	7 30.5	7 40.2	7 44.1	7 48.3	7 52.7	7 57.4	8 2.5	8 7.9	8 13.7
18	7 35.3	7 38.9	7 42.7	7 46.7	7 50.9	7 55.4	8 0.2	8 5.3	8 10.8	8 16.6	8 23.0
19	7 41.1	7 45.0	7 49.1	7 53.4	7 57.9	8 2.8	8 7.9	8 13.4	8 19.4	8 25.7	8 32.6
20	7 47.1	7 51.3	7 55.6	8 0.3	8 5.2	8 10.4	8 15.9	8 21.9		8 35.2	8 42.8
+21	7 53-3	7 57-7	8 2.4	8 7.3	8 12.6	8 18,2	8 24.2	8 30.7	8 37.6	8 45.2	8 53.5
22	7 59.6	8 4.3	8 9.4	8 14.7	8 20.3	8 26.4	8 32.8	8 39.8	8 47.4	8 55.7	9 4.8
23	8 6.I	8 11.2	8 16.6	8 22.3	8 28.3	8 34.9	8 41.9	8 49.5	8 57.7	9 6.8	9 16.9
24	8 12.9	8 18.3	8 24.0	8 30.2	8 36.7	8 43.8	8 51.4	8 59.6	9 8.7	9 18.8	9 30.0
25	8 19.9	8 25.7	8 31.8	8 38.4	8 45.5	8 53.1	9 1.4	9 10.5	9 20.5	9 31.7	9 44.4
26	8 27.1	8 33.4	8 40.0	8 47.0	8 54.7	9 3.0	9 12.1	9 22.1		9 45.9	
27	8 34.7	8 41.4	8 48.5	8 56.1	9 4.4	9 13.5	9 23.5	9 34.6		10 1.9	10 19.5
28	8 42.6	8 49.8	8 57.5	9 5.8	9 14.8	9 24.8		9 48.5		10 20.5	
29	8 51.0	8 58.7	9 7.0	9 16.1	9 26.0	9 37.1			10 21.5		
+30	8 59.7	9 8.1	9 17.2	9 27.1	1 9 38.2	9 50.7	5.1	110 22.3	10 44.4	11 18.5	-

# Reduktionstafel

#### für den Auf- und Untergang der Sonne

Das obere Vorzeichen gilt für den Aufgang, das untere Vorzeichen für den Untergang.

						Geogra	phische	Breite	)			
Ta	g	+30°	+32°	+34°	+36°	+38°	+40°	+42°	+44°	+46°	+48°	+50°
Jan.	2	∓62.6	∓57.9	∓53.°	∓47•9	∓42.5	∓36.6	∓3°.4	二字23·7	∓16.5	∓8.7	m 0.0
Febr.	12 22 I	〒58.4 〒52.0 〒44.1	∓53.9 ∓48.0 ∓40.7	∓49.4 ∓43.9 ∓37.2	∓44.5 ∓39.5 ∓32.5	∓39·5 ∓35·1 ∓29.6	∓34.1 ∓30.2 ∓25.6	$\mp 28.3$ $\mp 25.0$ $\mp 21.1$	∓22.0 ∓19.6 ∓16.4	∓15.3 ∓13.6 ∓11.5	∓8.0 ∓7.1 ∓5.9	0.0
1.001.	11	<del>=35.3</del>	<del>=</del> 32.6	<del>+31.2</del> <del>+29.7</del>	∓33·5 ∓26.8	±23.7 ∓23.7	<b>∓20.4</b>	<del>=</del> 16.8	<del>=13.0</del>	<b>= 9.1</b>	±3·9 ∓4·7	0.0
März	2 I 2	∓26.0 ∓16.3	∓24.0 ∓15.1	∓21.8 ∓13.7	∓19.7 ∓12.4	∓17.4 ∓10.9	∓14.9 ∓ 9.3	∓12.3 ∓ 7.7	∓ 9.5       ∓ 5.9	∓ 6.6 ∓ 4.1	∓3.4 ∓2.1	0.0
A '7	12 22	$\mp 6.6$ $\pm 3.1$	$\begin{array}{c} \mp 6.2 \\ \pm 2.8 \end{array}$	〒 5.6     ± 2.6	∓ 5.1 ± 2.4	<b>∓ 4.4</b> ± 2.1	∓ 3·7 ± 1.9	<b>∓ 3.1</b> ± 1.5	± 1.2	∓ 1.7 ± o.8	∓o.8 ±o.4	0.0
April	I	$\pm 12.7$ $\pm 22.4$	±11.7 ±20.6	±10.7 ±18.9	± 9.7	± 8.6 ±15.0	± 7.4 ±12.9	± 6.1   ±10.6	± 4.8 ± 8.4	± 3.3   ± 5.7	±1.7 ±3.0	0.0
Mai	2I I	±31.8 ±40.9	$\pm 29.3 \\ \pm 37.8$	±26.9 ±34.6	$\pm 24.2 \\ \pm 31.2$	$\pm 21.3 \\ \pm 27.6$	±18.4 ±23.7	±15.2 ±19.8	±11.9 ±15.4	± 8.2 ±10.7	±4.3 ±5.6	0.0
	11 21	±49.5 ±57.0	$\pm 45.8 \\ \pm 52.9$	±41.8 ±48.4	$\pm 37.8 \\ \pm 43.7$	±33.6 ±38.8	±28.8 ±33.4	±24.0 ±27.8	±18.6 ±21.7	±13.0 ±15.1	±6.8 ±7.9	0.0
Juni	31	±63.1 ±67.2	±58.6 ±62.3	±53.7 ±57.2	±48.5 ±51.7	±43.1 ±45.9	±37.1 ±39.7	±30.9 ±33.1	±24.2 ±26.0	±16.9 ±18.0	±8.8 ±9.5	0.0
oum	20	$\pm 68.8$ $\pm 67.8$	$\pm 63.8$ $\pm 62.8$	$\pm 58.6$ $\pm 57.7$	$\pm 52.9$ $\pm 52.1$	±47.0 ±46.3	±40.7 ±40.0	$\pm 33.9$ $\pm 33.3$	$\pm 26.6$ $\pm 26.2$	$\pm 18.5 \\ \pm 18.2$	±9.8 ±9.6	0.0
Juli	10	±64.3	±59.5	±54.6	±49.3	±43.9	±37.9	±31.5	±24.7	±17.1	±9.1	0.0
Aug.	20 30 9	±58.6 ±51.3 ±43.1 ±34.2	±54.2 ±47.5 ±39.8 ±31.6	$\pm 49.7$ $\pm 43.6$ $\pm 36.5$ $\pm 28.8$	±44.9 ±39.2 ±32.8 ±26.0	$\pm 39.9$ $\pm 34.8$ $\pm 29.1$ $\pm 23.0$	±34.4 ±30.0 ±25.1 ±19.9	$\pm 28.5$ $\pm 24.9$ $\pm 20.8$ $\pm 16.5$ $\pm 12.0$	$\pm 22.4$ $\pm 19.5$ $\pm 16.2$ $\pm 12.7$	$\pm 15.5$ $\pm 13.5$ $\pm 11.3$ $\pm 8.9$ $\pm 6.5$	±8.2 ±7.0 ±5.8 ±4.6	0.0
Sept.		±24.9 ±15.5	±23.0 ±14.2	±21.0 ±13.0	±19.0 ±11.8	±16.7 ±10.4	±14.4 ± 8.9	± 7.4	$\pm 9.2$ $\pm 5.7$	± 4.0	±3.3 ±2.0	0.0
Okt.	18 28 8 18	$\pm 6.0$ $\mp 3.8$ $\mp 13.3$ $\mp 22.8$	± 5.4 ∓ 3.4 ∓12.2 ∓21.0	± 4.9 ∓ 3.1 ∓11.1 ∓19.2	± 4.5 ∓ 2.7 ∓10.0 ∓17.2	± 4.0 ∓ 2.4 ∓ 8.8 ∓15.2	$\pm 3.4$ $\mp 2.1$ $\mp 7.6$ $\mp 13.1$	± 2.8 ∓ 1.7 ∓ 6.2 ∓I0.7	± 2.2 ∓ 1.3 ∓ 4.9 ∓ 8.4	± 1.6 ∓ 0.9 ∓ 3.3 ∓ 5.7	±0.8 ∓0.5 ∓1.7 ∓3.0	0.0
Nov.	28 7 17	∓32.1 ∓41.0 ∓49.3	∓29.6 ∓37.9 ∓45.5	∓27.1 ∓34.6 ∓41.6	∓24·3 ∓31.2 ∓37.6	∓21.5       ∓27.6       ∓33.1	∓18.4 ∓23.6 ∓28.5	∓15.2 ∓19.6 ∓23.7	∓11.9 ∓15.3 ∓18.4	∓ 8.2 ∓10.5 ∓12.8	∓4·3 ∓5.6 ∓6.8	0.0
Dez.	7	∓56.2 ∓61.3	∓52.0 ∓56.7	∓47·5 ∓51.9	∓42.9 ∓46.8	∓38.0 ∓41.5	$\mp 32.7$ $\mp 35.8$	$\mp 27.2$ $\mp 29.8$	∓21.2 ∓23·3	∓14.8 ∓16.2	∓7.7 ∓8.5	0.0
	17 27	∓64.0 ∓63.8	∓59.2 ∓59.0	∓54.2 ∓54.0	∓49.0 ∓48.8 =46.6	∓43·3 ∓43·3	∓37·4 ∓37·4 =35.6	∓31.1 ∓31.1	∓24·3 ∓24·3	∓16.9 ∓16.9	∓8.9 ∓8.9	0.0
	37	<del>=</del> 60.9	<del>=</del> 56.3	<b>=51.5</b>	<del>=</del> 46.6	<b>=41.3</b>	∓35.6	〒29.6	〒23.1	<del>-</del> 16.0	∓8.4	0.0

# Reduktionstafel

#### für den Auf- und Untergang der Sonne

Das obere Vorzeichen gilt für den Aufgang, das untere Vorzeichen für den Untergang.

						Geogra	ohische	Breite				
Ta	g	+50°	+51°	+52°	+53°	+54°	+55°	+56°	+57°	+58°	+59°	+60°
1940	0		-									
Jan.	2	0.0	±4.7	± 9.6	±14.8	±20.4	±26.3	±32.7	±39.5	±46.9	±54.9	±63.7
	12	0.0	±4.4	± 8.9	±13.7	±18.7	±24.3	±30.0	±36.2	±42.9	±50.1	±58.0
	22	0.0	±3.8	$\pm$ 7.8	±12.0	±16.5	±21.1	±26.2	±31.6	±37.2	±43.4	±50.0
Febr.	I	0.0	±3.2	$\pm$ 6.5	±10.0	±13.7	$\pm 17.6$	±21.8	±26.1	±30.8	±35.8	±41.2
	II	0.0	±2.5	± 5.1	± 7.9	±10.8	±13.9	±17.1	生20.4	±24.I	±27.9	±32.1
	21	0.0	±1.8	± 3.7	± 5.7	± 7.8	±10.0	±12.4	±14.7	±17.4	±20.I	±23.0
März	2	0.0	$\pm_{1.2}$	± 2.3	± 3.6	± 4.9	± 6.2	士 7.7	士 9.1	±10.8	±12.4	±14.1
	12	0.0	±0.5	± 0.9	± 1.4	士 2.0	± 2.5	± 3.1	± 3.6	± 4.2	± 4.9	$\pm$ 5.6
A 17	22	0.0	∓0.2	平 0.5	平 0.7	∓ 0.9	〒1.3	$\mp$ 1.6	干 1.9	干 2.2	$\mp$ 2.6	干 3.0
April	I	0.0	∓0.9	〒 1.9	<b>=</b> 2.8	∓ 3.9	干 5.0	$\mp$ 6.2	<b>∓ 7.</b> 5	<b>∓ 8.7</b>	〒10.2	<b>=11.5</b>
	II	0.0	<b>=1.5</b>	<b>∓</b> 3⋅3	<b>=</b> 5.0	<del>=</del> 6.9	<b>∓</b> 8.8	<b>∓10.8</b>	平13.1	<b>=15.3</b>	<b>=17.8</b>	<b>=20.3</b>
	21	0.0	平2.2	干 4.7	平 7.2	∓ 9.9	干12.7	₹15.6	$\pm 18.8$	干22.1	平25.6	∓29.4
Mai	I	0.0	∓3.0	〒 6.2	∓ 9.4	〒12.9	∓16.6	∓20.4	<del>724.6</del>	<b>=</b> 28.9	∓33.6	<del>=</del> 38.6
	II	0.0	$\mp 3.6$	于 7.5	<b>=11.5</b>	∓15.8	∓20.4	〒25.1	∓30.4	∓35.9	<b>=41.8</b>	∓48.1
	21	0.0	<b>平4.2</b>	∓ 8.8	∓13.5	∓18.5	〒24.0	∓29.7	∓35.9	<del>=42.6</del>	∓49.8	<del>=57.6</del>
	31	0.0	干4.7	<b>∓</b> 9.8	∓15.3	<b>=20.9</b>	<b>=27.1</b>	∓33.7	<b>∓40.8</b>	∓48.4	<b>∓</b> 56.8	∓66. <b>1</b>
Juni	10	0.0	平5.1	<b>∓10.6</b>	∓16.4	∓22.7	〒29.3	∓36.4	∓44.2	<b>〒52.6</b>	〒62.0	<b>平72.4</b>
	20	0.0	干5.3	710.9	∓16.9	∓23.3	∓30.2	∓37.5	<del>=45.6</del>	∓54.4	<b>∓64.0</b>	∓75. <b>r</b>
T 11	30	0.0	<b>平5.2</b>	∓10.7	∓16.6	〒22.9	∓29.5	<del>=</del> 36.8	∓44.7	∓53.3	$\mp 62.7$	干73-4
Juli	10	0.0	∓4.9	∓10.1	∓15.5	〒21.4	∓27.7	∓34.4	<b>∓41.6</b>	∓49.5	∓58.2	∓67.7
	20	0.0	∓4.4	∓ 9.0	∓13.9	∓19.2	〒24.8	∓30.7	∓37.1	∓44.0	<b>=51.5</b>	∓59.7
	30	0.0	<b>∓3.8</b>	<b>7.8</b>	平12.0	<del>=16.5</del>	<b>=21.2</b>	<b>=26.3</b>	∓31.7	∓37.5	∓43.7	<b>∓50.5</b>
Aug.	9	0.0	<b>=3.2</b>	<b>∓</b> 6.4	∓ 9.9	∓13.7	∓17.5	<b>=21.7</b>	<b>∓26.</b> 0	∓30.7	∓35.6	∓41.0
	19	0.0	<b>平2.5</b>	干 5.0	平 7.7	∓10.7	<b>=13.6</b>	〒16.9	<del>=</del> 20.2	干23.9	<b>=27.6</b>	〒31.8
	29	0.0	∓1.8	<b>=</b> 3.6	<b>=</b> 5.6	平 7.7	<del>=</del> 9.8	<b>∓12.1</b>	∓14.5	∓17.1	∓19.8	∓22.7
Sept.	8	0.0	平1.2	∓ 2.2	∓ 3.5	<b>∓</b> 4.8	<b>∓</b> 6.0	∓ 7.5	∓ 8.9	<b>=10.5</b>	干12.2	∓14.0
	18	0.0	∓0.5	∓ 0.8	〒 1.4	± 1.9	平 2.3	〒 2.9	∓ 3.4	∓ 4.1	干 4.7	干 5.4
01.	28	0.0	±0.2	$\pm$ 0.6	土 0.7	± 1.0	± 1.4	$\pm$ 1.6	± 2.0	± 2.3	± 2.6	± 3.0
Okt.	8	0.0	±0.9	± 1.9	± 2.9	士 3.9	± 5.1	± 6.2	± 7.4	± 8.7	±10.1	±11.4
	18	0.0	$\pm 1.6$	± 3·3	± 5.0	$\pm 6.8$	$\pm$ 8.8	±10.7	±12.9	±15.2	±17.6	±20.I
3.7	28	0.0	±2.2	± 4.7	± 7.1	± 9.7	±12.6	±15.4	±18.5	±21.8	±25.2	±28.9
Nov.	7	0.0	±2.9	± 6.1	± 9.2	±12.7	±16.3	±20.1	±24.1	±28.4	±33.0	±38.0
	17	0.0	±3.6	± 7.4	±11.3	±15.5	±19.9	±24.6	±29.7	±35.0	±40.7	±46.9
Don	27	0.0	±4.I	± 8.4	±13.2	±18.0	±23.1	±28.7	$\pm 34.6$	±41.0	±47.8	±55.3
Dez.	7	0.0	±4.6	± 9.3	±14.6	±19.9	±25.7	±31.9	±38.4	±45.7	±53.4	±61.9
	17	0.0	±4.8	± 9.8	±15.2	±20.9	±27.0	±33.5	±40.6	±48.3	±56.5	±65.7
	27	0.0	±4.8	± 9.8	±15.2	±20.9	±27.0	±33.5	±40.4	±48.1	$\pm 56.3$	$\pm 65.5$
	37	0.0	$\pm 4.6$	$ \pm 9.3 $	±14.3	±19.7	±25.5	$\pm 31.7$	±38.2	±45.2	±53.0	$\pm 61.3$

#### Reduktionstafel

#### für den Auf- und Untergang des Mondes

Das obere Vorzeichen gilt für den Aufgang, das untere Vorzeichen für den Untergang.

t*)					Geogra	ohische	Breite				
	+30°	+32°	+34°	+36°	+38°	+40°	+42°	+44°	+46°	+48°	+50°
h m		m	m	m	m	m	m	m	m	m	m
3 20	∓94.6 ∓88.5	∓87.9 ∓82.2	∓80.9 ∓75.6	<b>∓73·4</b> <b>∓68.5</b>	<del>=65.5</del> <del>=61.0</del>	$\mp 56.9$ $\mp 52.9$	∓47.6 ∓44.2	<b>∓37.5</b> <b>∓34.8</b>	<b>∓26.4</b> <b>∓24.4</b>	〒14.0 〒12.9	0.0
3 40	∓82.5	<b>∓76.5</b>	<b>〒70.3</b>	$\mp 63.7$	<b>∓51.6 ∓56.6</b>	<del>+32.9</del> <del>+49.1</del>	<del>= 44.2</del> <del>= 41.0</del>	<b>∓32.2</b>	<b>∓22.5</b>	<b>∓11.9</b>	0.0
3 50	<b>∓76.6</b>	<b>=71.0</b>	∓65.2	∓59.0	<b>=52.4</b>	∓45.3	∓37.8	<del>= 29.6</del>	∓20.7	<b>=10.9</b>	0.0
4 0	<b>∓70.8</b>	<b>∓65.6</b>	<b>∓60.1</b>	∓54.4	<b>=48.2</b>	<b>=41.7</b>	∓34.7	<b>平27.2</b>	∓18.9	<b>=</b> 9.9	0.0
4 10	∓65.r	<b>∓60.3</b>	∓55.2	   <del>∓</del> 49.9	<b>∓44.2</b>	<b>∓</b> 38.2	<b>=31.7</b>	<b>∓24.8</b>	<b>=17.3</b>	<b>=</b> 9.0	0.0
4 20	<b>∓59.5</b>	<b>∓55.0</b>	<b>∓50.3</b>	干45.5	∓40.3 ∓40.3	$\pm 34.8$	<b>∓31.7</b> <b>∓28.9</b>	$\pm 22.5$	干15.7	∓ 9.0       ∓ 8.2	0.0
4 30	∓54.0	∓49.9	<b>=45.6</b>	<b>=41.2</b>	<del>=</del> 36.5	∓31.4	<b>∓26.1</b>	∓20.4	<b>=14.1</b>	<b>∓</b> 7.4	0.0
4 40	∓48.4	∓44.8	∓40.9	<b>∓</b> 36.9	∓32.7	∓28.2	∓23.3	∓18.2	<b>=12.6</b>	<b>=</b> 6.6	0.0
4 50	∓43.0	∓39.8	<b>∓36.4</b>	∓32.7	∓29.0	∓24.9	〒20.7	∓16. <b>1</b>	于11.2	<b>=</b> 5.8	0.0
5 0	∓37.7	=34.8	<b>平31.8</b>	<b>∓28.6</b>	∓25.3	<b>=21.8</b>	∓18. <b>1</b>	<b>=14.1</b>	<b>∓</b> 9.8	∓ 5.0	0.0
5 10	<b>∓32.4</b>	<del>+34.0</del> <del>+29.9</del>	$\mp 37.3$	<b>∓24.6</b>	$\mp 21.7$	<b>∓18.7</b>	∓15.5	<b>∓12.1</b>	+ 9.0     ∓ 8.4	± 4·3	0.0
5 20	∓27.I	∓25.0	<b>=22.8</b>	∓20.6	<b>=18.2</b>	∓15.6	<b>=12.9</b>	<b>=10.1</b>	∓ 7.0	<b>=</b> 3.6	0.0
5 30	∓21.9	∓20.2	∓18.4	∓16.6	∓14.7	<b>=12.6</b>	∓10.4	<b>∓ 8.1</b>	<b>=</b> 5.6	<b>= 2.9</b>	0.0
5 40	〒16.7	∓15.4	∓14.0	〒12.6	平11.2	<b>∓</b> 9.6	∓ 7.9	〒 6.2	<b>=</b> 4.3	∓ 2.2	0.0
5 50	<b>=11.5</b>	<b>∓10.6</b>	∓ 9.7	<b>=</b> 8.7	<b>∓</b> 7.7	<b>=</b> 6.6	<b>∓</b> 5·5	<b>=</b> 4.2	<b>=</b> 2.9	<b>= 1.5</b>	0.0
6 0	<b>=</b> 6.4	<b>=</b> 5.8	∓ 5.4	<b>=</b> 4.8	<b>=</b> 4.2	<del>=</del> 3.6	<b>∓</b> 3.0	<b>∓</b> 2.3	<b>= 1.6</b>	<b>∓ 0.9</b>	0.0
6 10	〒 1.2	干 1.1	<b>∓ 1.0</b>	∓ 0.9	<b>∓</b> o.8	∓ 0.7	∓ 0.6	∓ 0.4	∓ 0.3	∓ 0.2	0.0
6 20	± 4.0	± 3.7	± 3.4	± 3.0	± 2.6	± 2.3	± 1.9	± 1.5	土 1.0	± 0.5	0.0
6 30	± 9.1	± 8.4	<b>= 7.7</b>	± 6.9	$\pm$ 6.1	± 5·3	± 4.4	± 3.4	± 2.4	± 1.2	0.0
6 40	±14.3	±13.2	±12.0	±10.8	± 9.6	± 8.2	± 6.8	± 5.3	± 3.7	± 1.9	0.0
6 50	±19.5	±18.0	±16.4	±14.8	生13.1	±11.2	± 9.3	土 7.2	± 5.0	± 2.6	0.0
7 0	±24.7	±22.8	±20.9	$\pm$ 18.8	$\pm 16.6$	±14.2	±11.8	± 9.1	$\pm$ 6.3	± 3·3	0.0
7 10	±30.0	±27.7	±25.3	±22.8	±20.1	$\pm 17.3$	±14.3	±11.1	± 7.7	± 4.0	0.0
7 20	±35.3	$\pm$ 32.6	±29.7	±26.8	±23.7	±20.3	±16.8	±13.1	士 9.1	± 4.7	0.0
7 30	±40.6	±37·5	±34·3	±30.9	±27.3	±23.4	±19.4	±15.1	±10.5	± 5.5	0.0
7 40	±45.9	±42.5	±38.9	±35.0	±31.0	±26.6	±22.I	±17.2	±12.0	± 6.2	0.0
7 50	±51.4	$\pm 47.6$	±43.5	±39.2	±34·7	土29.9	±24.8	±19.3	±13.5	± 7.0	0.0
8 0	$\pm 56.9$	$\pm 52.7$	$\pm 48.2$	±43.5	±38.5	±33.2	$\pm 27.6$	±21.5	±15.0	± 7.8	0.0
8 10	$\pm 62.5$	±57.9	±53.0	±47·9	±42.4	±36.6	±30.4	±23.8	$\pm 16.6$	$\pm$ 8.6	0.0
8 20	±68.2	±63.2	±57.9	±52.3	±46.4	±40.1	$\pm_{33.3}$	±26.1	±18.2	± 9.5	0.0
8 30	±74.0	$\pm 68.5$	±62.9	$\pm 56.9$	±50.5	±43.7	±36.4	±28.5	±19.8	±10.5	0.0
8 40	±79.8	土74.0	$\pm 67.9$	±61.5	±54·7	±47·3	士39.5	±30.9	±21.6	±11.4	0.0
8 50	$\pm 85.8$	±79.6	±73.1	$\pm 66.3$	±59.0	±51.1	$\pm 42.7$	±33.5	±23.5	±12.5	0.0
9 0	±91.9	$\pm 85.3$	±78.4	±71.2	$\pm 63.4$	±55.0	±46.0	$\pm 36.3$	±25.5	±13.5	0.0

\*) t ist beim Aufgang der Zeitunterschied zwischen Aufgang und Kulmination, beim Untergang der Zeitunterschied zwischen Kulmination und Untergang.

#### für den Auf- und Untergang des Mondes

Das obere Vorzeichen gilt für den Aufgang, das untere Vorzeichen für den Untergang.

t*)					Geo	graphis	che Bre	eite		ica	
	+50°	+51°	+52°	+53°	+54°	+55°	+56°	+57°	+58°	+59°	+60°
h m	m 0.0	±7.7	±16.1	±25.2	±35.1	±46.1	±58.4	±72.5	±89.1	±109.7	±138.1
3 30	0.0	±7.I	±14.7	±22.9	±31.8	±41.6	±52.4	±64.5	±78.3	± 94.5	±114.3
3 40	0.0	±6.5	±13.4	±20.9	±28.9	±37.6	±47.2	±57.7	±69.4	± 82.7	± 98.2
3 50	0.0	±5.9	±12.2	±19.0	±26.2	±34.0	±42.5	±51.7	±61.9	± 73·3	± 86.1
4 0	0.0	±5.4	±11.1	±17.2	±23.7	±30.8	±38.2	±46.3	±55.2	± 65.0	± 76.0
4 10	0.0	±4.9	±10.1	±15.6	土21.4	±27.7	±34.4	±41.6	±49.4	± 57.9	± 67.3
4 20	0.0	±4.5	± 9.1	±14.0	士19.2	±24.8	±30.8	±37.2	±44.0	± 51.5	± 59.6
4 30	0.0	±4.0	± 8.1	±12.5	±17.2	±22.2	±27.5	±33.1	±39.1	± 45·7	± 52.7
4 40	0.0	$\pm 3.5$	$\pm 7.3$	±11.2	±15.3	±19.7	±24·3	±29.3	±34.5	± 40.2	$\pm$ 46.3
4 50	0.0	±3.1	± 6.4	± 9.8	士13.4	±17.3	±21.4	±25.6	±30.2	± 35.1	± 40.4
5 0	0.0	±2.7	± 5·5	生 8.5	±11.6	±15.0	±18.5	±22.2	±26.1	± 30.3	$\pm$ 34.8
5 10	0.0	±2.3	± 4·7	± 7.2	±10.0	±12.8	±15.7	±18.9	±22.2	± 25.7	士 29.5
5 20	0.0	±2.0	± 3.9	$\pm$ 6.0	± 8.3	±10.7	±13.1	土15.7	±18.4	± 21.3	± 24.4
5 30	0.0	±1.6	± 3.2	± 4.8	$\pm$ 6.7	± 8.5	±10.5	±12.6	±14.8	± 17.1	± 19.6
5 40	0.0	±1.2	± 2.4	± 3.7	± 5.0	$\pm$ 6.5	± 7.9	士 9.5	±11.2	± 13.0	± 14.8
5 50	0.0	±0.8	± 1.7	± 2.6	± 3.4	± 4.4	± 5.5	± 6.5	± 7-7	± 8.9	± 10.2
6 0	0.0	±0.5	± 0.9	± 1.4	± 1.9	± 2.4	± 3.0	$\pm$ 3.6	± 4.2	± 4.9	$\pm$ 5.6
6 10	0.0	±0.1	± 0.2	± 0.2	± 0.4	± 0.5	± 0.6	± 0.7	± 0.8	± 0.9	± 1.1
6 20	0.0	∓o.3 ∓o.6	∓ 0.6 ∓ 1.3	〒 0.9	<b>平 1.2 平 2.7</b>	<b>∓</b> 1.5	〒 1.9	∓ 2.3 = 5.0	$\mp 2.6$ $\mp 6.0$	∓ 3.0	∓ 3·5 ∓ 8.0
	0.0			<b>∓</b> 2.0		∓ 3.5	<b>∓</b> 4⋅3	<b>∓</b> 5.2		∓ 7.0	
6 40	0.0	平1.0	∓ 2.I	<b>∓</b> 3.1	<b>∓</b> 4·3	<b>∓</b> 5·5	= 6.8	∓ 8. <b>ɪ</b>	∓ 9.5	<b>∓</b> 11.0	<b>=</b> 12.6
6 50	0.0	平1.3	〒 2.9	∓ 4.3	<b>∓</b> 5.9	于 7.5	∓ 9.4	<b></b>	<b>∓13.1</b>	∓ 15.1	<b>=</b> 17.3
7 0	0.0	∓I.7	∓ 3.6	<b>∓</b> 5.5	<b>∓</b> 7·5	∓ 9.6	<b>±11.9</b>	<b>∓14.3</b>	〒16.7	∓ 19·3	<b>平 22.2</b>
7 10	0.0	平2.I 干2.F	∓ 4·4 ∓ 5·1	∓ 6.7 ∓ 7.9	∓ 9.2 ∓10.8	∓11.7 〒12.8	平14.5 〒77.1	<b>∓17.4</b> <b>∓20.6</b>	<b>∓20.4</b> <b>∓24.2</b>	∓ 23.7 ∓ 28.1	<b>∓</b> 27.1 <b>⊤</b> 22.2
7 20	0.0	<b>=2.5</b>		<b>∓</b> 7.9		<b>=13.8</b>	<b>平17.1</b>	+20.0			<b>∓</b> 32·3
7 30	0.0	<b>=2.9</b>	<b>=</b> 6.0	干 9.2	平12.6	∓16.1	∓19.9	∓24.0	<b>=28.2</b>	<b>=</b> 32.8	<b>∓</b> 37·7
7 40	0.0	∓3.3	<b>∓</b> 6.9	<b>∓10.6</b>	干14.4	〒18.5	〒22.9	<b>平27.5</b>	∓32.4	<b>∓</b> 37.8	∓ 43.4
7 50	0.0	<b>∓3.8</b>	平 7.7	〒12.0	<b>= 16.3</b>	<b>年21.0</b>	<b>∓25.9</b>	<b>∓31.3</b>	∓36.9	∓ 43.0 = 40.5	<del>=</del> 49.6
8 0	0.0	<b>4.2</b>	∓ 8.7 = 0.6	干13.4	∓18.3 =20.4	∓23·7 = 26.4	<b>= 29.2</b>	∓35⋅3	<b></b>	∓ 48.7 = 54.8	<b>∓</b> 56.3 <b>=</b> 63.5
	0.0	∓4.7	∓ 9.6	∓14.9	<b>=20.4</b>	平26.4	<b>∓32.6</b>	∓39.5	<b>∓46.8</b>	<b>=</b> 54.8	<b>=</b> 63.5
8 20	0.0	<b></b> ∓5.2	<b>∓10.6</b>	<b>=16.4</b>	<b>=22.6</b>	〒29.2	$\mp 36.3$	∓44.0	<b>∓52.3</b>	$\mp$ 61.5	<b>71.6</b>
8 30	0.0	<b>∓5.7</b>	<b>=11.7</b>	<b>∓18.1</b>	<b>∓25.0</b>	∓32.4	∓40.4	∓49.1	<b>∓58.6</b>	∓ 69. <b>1</b>	<b>∓</b> 81.0
8 40	0.0	∓6.3 −6.8	〒12.9	<b>∓19.9</b>	<b>∓27.6</b>	∓35.8	∓44·9	∓54.9	<b>∓65.7</b>	∓ 77.9	<b>∓</b> 92.1
8 50	0.0	<b>∓6.8</b>	<b>=14.1</b>	∓21.9 ∓24.T	<b>∓30.5</b> <b>∓32.7</b>	∓39.7	<b>∓49.8</b>	∓61.2 =68.4	<b>∓73.8</b>	∓ 88.5 = 101.4	<b>=106.1</b>
9 0	0.0	∓7.4	〒15.4	∓24.I	∓33.7	∓44.1	∓55.3	<b>∓68.4</b>	∓83.6	平101.4	<del>=125.9</del>

<sup>\*)</sup> t ist beim Aufgang der Zeitunterschied zwischen Aufgang und Kulmination, beim Untergang der Zeitunterschied zwischen Kulmination und Untergang.

## Hilfstafeln

#### zur Berechnung der optischen Mondlibration

<b>λ</b> –Ω	Δλ	а	В	<b>y</b> −Ω	<b>y</b> −Ω	Δλ	а	В	λ-Ω
0	,		0 ,		0	,		0 ,	۰
0	+0.0+	-0.0269+	-0 0.0+	180	45	+0.6+	-0.0190+	-I 5.3+	225
I	0.0	268	0 1.6	181	46	0.6	187	1 6.4	226
2	0.0	268	0 3.2	182	47	0.6	183	1 7.5	227
3	0.1	268	0 4.8	183	48	0.6	180	ı 8.6	228
4	1.0	268	0 6.4	184	49	0.6	176	1 9.7	229
5	+1.0+	-0.0268+	-0 8.0+	185	50	+0.6+	-0.0173+	-I 10.7+	230
6	1.0	267	0 9.7	186	51	0.6	169	8.11.1	231
7	0.1	267	0 11.3	187	52	0.6	165	1 12.8	232
8	0.2	266	0 12.9	188	53	0.6	162	1 13.8	233
9	0.2	265	0 14.4	189	54	0.6	158	1 14.7	234
10	+0.2+	-0.0264+	-0 16.0+	190	55	+0,6+	-0.0154+	-1 15.6+	235
11	0.2	264	0 17.6	191	56	0.6	150	1 16.5	236
12	0.2	263	0 19.2	192	57	0.6	146	1 17.4	237
13	0.3	262	0 20.8	193	58	0.6	142	1 18.3	238
14	0.3	261	0 22.3	194	59	0.5	138	1 19.2	239
15	+0.3+	-0.0259+	-0 23.9+	195	60	+0.5+	-0.0134+	-I 20.0+	240
16	0.3	258	0 25.5	196	61	0.5	130	1 20.8	241
17	0.3	257	0 27.0	197	62	0.5	126	1 21.5	242
18	0.4	255	0 28.5	198	63	0.5	122	I 22.3	243
19	0.4	254	0 30.1	199	64	0.5	118	1 23.0	244
20	+0.4+	-0.0252+	-0 31.6+	200	65	+0.5+	-0.0114+	-1 23.7+	245
21	0.4	251	0 33.1	201	66	0.5	109	I 24.4	246
22	0.4	249	0 34.6	202	67	0.4	105	1 25.0	247
23	0.4	247	0 36.1	203	68	0.4	101	1 25.6	248
24	0.5	245	0 37.6	204	69	0.4	096	1 26.2	249
25	+0.5+	-0.0243+	-0 39.0+	205	70	+0.4+	-0.0092+	-1 26.8+	250
26	0.5	241	0 40.5	206	71	0.4	87	1 27.3	251
27	0.5	239	0 41.9	207	72	0.4	83	1 27.8	252
28	0.5	237	0 43.4	208	73	0.3	79	1 28.3	253
29	0.5	235	0 44.8	209	74	0.3	74	1 28.8	254
30	+0.5+	-0.0233+	-0 46.2+	210	75	+0.3+	-0.0070+	-I 29.2+	255
31	0.5	230	0 47.6	211	76	0.3	65	1 29.6	256
32	0,6	228	0 48.9	212	77	0.3	60	1 30.0	257
33	0.6	225	0 50.3	213	78	0.2	56	1 30.3	258
34	0.6	223	0 51.6	214	79	0.2	51	1 30.6	259
35	+0.6+	-0.0220+	<b>-</b> ○ 53.0+	215	80	+0.2+	-0.0047+	-1 30.9+	260
36	0.6	217	0 54.3	216	81	0.2	42	I 31.2	261
37	0.6	214	0 55.6	217	82	0,2	37	1 31.4	262
38	0.6	212	0 56.9	218	83	0.1	33	1 31.6	263
39	0.6	209	0 58.1	219	84	0.1	28	1 31.8	264
40	+0.6+	-0.0206+	-0 59.4+	220	85	+0.1+	-0.0023+	-1 32.0+	265
41	0.6	203	1 0.6	221	86	0.1	19	1 32.1	266
42	0.6	200	1 1.8	222	87	0.1	14	I 32.2	267
43	0.6	196	1 3.0	223	88	0.0	09	I 32.3	268
44	0.6	193	1 4.1	224	89	0.0	05	I 32.3	269
45	+0.6+	-0.0190+	-r 5.3+	225	90	+0.0+	-0.0000+	-1 32.3+	270

 $l' = \lambda + \Delta \lambda - a(B - \beta) - L_{\mathbb{C}}; \quad b' = B - \beta$ 

l',b'=Optische Libration der Mondmitte in selenographischer Länge und Breite.

 $\lambda,\,\beta=\text{L\"{a}}\text{nge}$  und Breite des Mondmittelpunktes, berechnet für den Beobachtungsort.

 $L_{\mathbb{C}}= ext{Mittlere L\"ange des Mondes, }\Omega= ext{Mondknoten.}$ 

#### zur Berechnung der optischen Mondlibration

<b>λ</b> −Ω	Δλ	а	В	<b>y</b> –Ω	<b>λ</b> –Ω	Δλ	а	В	у-8
0	,		0 1	0	0	,		0 ,	0
90	-0.0-	+0.0000-	-I 32.3+	270	135	-0.6-	+0.0190-	-I 5.3+	315
91	0.0	05	I 32.3	271	136	0.6	193	1 4.1	316
92	0,0	09	1 32.3	272	137	0,6	196	1 3.0	317
93	0.1	14	1 32.2	273	138	0.6	200	1 1.8	318
94	0.1	19	1 32.1	274	139	0.6	203	1 0.6	319
95	-0.1-	+0.0023-	-1 32.0+	275	140	-0.6-	+0.0206-	-0 59.4+	320
96	0.1	28	1 31.8	276	141	0,6	209	0 58.1	321
97	0.1	33	1 31.6	277	142	0.6	212	0 56.9	322
98	0.2	37	1 31.4	278	143	0.6	214	0 55.6	323
99	0.2	42	1 31.2	279	144	0.6	217	0 54.3	324
100	-0.2-	+0.0047-	-1 30.9+	280	145	-0.6-	+0.0220-	-o 53.o+	325
101	0.2	51	1 30.6	281	146	0.6	223	0 51.6	326
102	0.2	56	1 30.3	282	147	0.6	225	0 50.3	327
103	0.3	60	1 30.0	283	148	0.6	228	0 48.9	328
104	0,3	65	1 29.6	284	149	0.5	230	0 47.6	329
105	-0.3-	+0.0070-	-1 29.2+	285	150	-0.5-	+0.0233-	-0 46.2+	330
106	0.3	74	1 28.8	286	151	0.5	235	0 44.8	331
107	0.3	79	1 28.3	287	152	0.5	237	0 43.4	332
108	0.4	83	1 27.8	288	153	0.5	239	0 41.9	333
109	0.4	87	1 27.3	289	154	0.5	241	0 40.5	334
110	-0.4-	+0.0092-	-I 26.8+	290	155	-0.5-	+0.0243-	-0 39.0+	335
111	0.4	096	1 26.2	291	156	0.5	245	0 37.6	336
112	0.4	101	1 25.6	292	157	0.4	247	0 36.1	337
113	0.4	105	1 25.0	293	158	0.4	249	0 34.6	338
114	0.5	109	I 24.4	294	159	0.4	251	0 33.1	339
115	-0.5-	+0.0114-	-1 23.7+	295	160	-0.4-	+0.0252-	-0 31.6+	340
116	0.5	118	1 23.0	296	161	0.4	254	0 30.1	341
117	0.5	122	1 22.3	297	162	0.4	255	0 28.5	342
118	0.5	126	1 21.5	298	163	0.3	257	0 27.0	343
119	0.5	130	1 20.8	299	164	0.3	258	0 25.5	344
120	-0.5-	+0.0134-	-1 20.0+	300	165	-0.3-	+0.0259-	-0 23.9+	345
121	0.5	138	1 19.2	301	166	0.3	261	0 22.3	346
122	0.6	142	1 18.3	302	167	0.3	262	0 20.8	347
123	0.6	146	1 17.4	303	168	0.2	263	0 19.2	348
124	0.6	150	1 16.5	304	169	0.2	264	0 17.6	349
125	-0,6-	+0.0154-	-1 15.6+	305	170	-0.2-	+0.0264-	-0 16.0+	350
126	0.6	158	I 14.7	306	171	0.2	265	0 14.4	351
127	0.6	162	1 13.8	307	172	0.2	266	0 12.9	352
128	0,6	165	1 12.8	308	173	0,1	267	0 11.3	353
129	0.6	169	1 11.8	309	174	0.1	267	0 9.7	354
130	-o.6-	+0.0173-	-1 10.7+	310	175	-0.1-	+0.0268-	-0 8.0+	355
131	0.6	176	I 9.7	311	176	0.1	268	0 6.4	355
132	0.6	180	1 8.6	311	177	0.1	268	0 4.8	357
132	0.6	183	1 7.5	313	178	0.0	268	0 3.2	357
134	0.6	187	I 6.4	314	179	0.0	2,68	0 1.6	359
135	<b>-</b> 0.6-	+0.0190-	-I 5.3+	315	180		+0.0269-	-0 0.0+	360

$$l' = \lambda + \Delta \lambda - a (B - \beta) - L_{\odot}; \quad b' = B - \beta$$

l', b' = Optische Libration der Mondmitte in selenographischer Länge und Breite.

 $<sup>\</sup>lambda,\;\beta=\text{L\"{a}nge}$  und Breite des Mondmittelpunktes, berechnet für den Beobachtungsort.

 $L_{\mathbb{C}}=\text{Mittlere L\"ange des Mondes, } {\mathbb{Q}}=\text{Mondknoten.}$ 

# Hilfsgrößen

## zur Berechnung der geozentrischen Koordinaten

 $\rho \sin \phi' = s \sin \phi;$   $\rho \cos \phi' = c \cos \phi$ 

ō.	$\log s$	log c	φ	log s	log c
٥	2.1 9		0		
± 0	9.9970705	0.0000000	±40	9.9976745 252	0.0006040 252
I	.9970709 14	.0000004	41	.9976997 254	.0006292
2	.9970723 22	.0000018	42	.9977251 255	.0006546
3	.9970745 31	.0000040	43	.9977506 255	.0006801
4	.9970776	.0000071 40	44	.9977701 255	.0007056 255
5	9.9970816	0.0000111	45	9.9978016 256	0.0007311 256
6	.9970865	.0000160 57	46	.9978272 255	.0007567 255
7	.9970922 66	.0000217 66	47	.9978527 255	.0007822
8	.9970988 74	.0000283 74	48	.9978782 254	.0008077
9	.9971062 83	.0000357 83	49	.9979036 252	.0008331 252
10	9.9971145 92	0.0000440 92	50	9.9979288 252	0.0008583
II	.9971237 99	.0000532	51	9979540	.0008835
12	.9971336 108	.0000631	52	.9979789 247	.0009084
13	.9971444 116	.0000739 116	53	.9980030	.0009331
14	.9971560 123	.0000855	54	.9980281	.0009576 242
15	9.9971683	0.0000978	55	9.9980523 239	0.0009818 239
16	0071814	.0001109	56	.9980762 235	.0010057 235
17	.9971953 146	.0001248 146	57	9980997 232	.0010292 232
18	0072000	.0001304	58	.9981229 238	.0010524 228
19	.9972253 160	.0001548 160	59	.9981457 224	.0010752 224
20	9.9972413 168	0.0001708 168	60	9.9981681	0.0010976 220
2 I	.9972581 174	.0001876	61	.0081001	.0011196 215
22	.9972755 180	.0002050 180	62	.9082116	.0011411 209
23	.9972935 187	.0002230 187	63	.9982325	.0011620 205
24	.9973122 192	.0002417 192	64	.9982530 205	.0011825 199
25	9.9973314 198	0.0002609 198	65	9.9982729 193	0.0012024 193
26	.9973512 204	.0002807 204	66	.9982922 188	.0012217 188
27	.9973716 209	.0003011 209	67	.9983110 181	.0012405 181
28	.9973925 214	.0003220 214	68	.9983291 175	.0012586 175
29	.9974139 219	.0003434 219	69	.9983466 168	.0012761 168
30	9.9974358 223	0.0003653 223	70	9.9983634 161	0.0012929 161
31	.9974581 227	.0003876 227	71	.9983795 154	.0013090 154
32	0074808	0004102	72	0082040	.0013244 147
33	0075040	0004225	73	.9984096	.0013391 140
34	·9975275 238	.0004335 235	74	.9984236	.0013531 132
35	9.9975513 241	0.0004808	75	9.9984368	0.0013663 124
36	0000000	241	76	.9984492 117	.0013787 117
37	0075000	0005304 ~43	77	.9984609 108	.0013904 108
38	.0076245	0005540	78	.9984717 100	.0014012
39	.9976494 251	.0005789 251	79	.9984817 92	.0014112 92
40	9.9976745	0.0006040	80	9.9984909	0.0014204

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
A.7	m	0 ,	h m	a	0 ,	
Abastumani(Mt.Kanobili)	1700	+41 43 "	- 2 51 s	- 28.1	+41 32	9.999471
Abbadia	69	+43 22 52.2	+ 0 7 0.1	+ 1.15	+43 11 17.8	9.999317
Abo		+60 26 56.8	- I 29 6.30	- 14.64	+60 16 58.8	9.998894
Adelaide	41	-34 55 35.I	- 9 14 19.90	- 91.06	-34 44 42.7	9.999526
Albany (Neue Sternw.)1). Algier (Neue Sternw.)2).	40	+42 39 12.8 +36 48 4.8	+ 4 55 7.12	+ 48.48	+42 27 39.7	9.999334
	345		- o 12 8.47	- 1.99	+36 36 58.1	9.999497
Allegheny (Neue Sternw.).	370	+40 28 58.1	+ 5 20 5.39	+ 52.59	+40 17 31.4	9.999411
Allegheny (Alte Sternw.) .	349	+40 27 41.6	+ 5 20 2.97	+ 52.58	+40 16 15.0	9.999411
Amherst (Neue Sternw.) .	IIO	+42 21 56.5	+ 4 50 5.98	+ 47.66	+42 10 24.0	9.999346
Ann Arbor	282	+42 16 48.7	+ 5 34 55.27	+ 55.02	+42 5 16.4	9.999360
Arcetri Zentr. d. Sternw.3).	184	+43 45 14.4	- o 45 I.30	<i>−</i> 7.39	+43 33 39.5	9.999316
Arequipa <sup>4</sup> )	2451	—16 22 28.0	+ 4 46 11.73	+ 47.02	—16 16 12.7	0.000052
Armagh	64	+54 21 11	+ 0 26 35.48	+ 4.37	+54 10 11.4	9.999041
Athen	110	+37 58 15.5	— I 34 52.2	<b>—</b> 15.58	+37 47 1.2	9.999456
Bamberg (Remeis-Sternw.)	288	+49 53 6.0	- o 43 33·57	<b>—</b> 7.15	+49 41 40.0	9.999167
Barcelona <sup>5</sup> )	415	+41 24 59.3	— o 8 30.2	- 1.41	+41 13 29.4	9.999391
Bayreuth (Haus d. Erziehung)	354	+49 56 46	- 0 46 18.4	— 7.6 <sub>1</sub>	+49 45 20	9.999170
Belgrad	250	+44 48 8	— I 22 3.8	— <b>13.4</b> 8	+44 36 32	9.999294
Bergedorf MerKr	41	+53 28 46.9	- 0 40 57.74	- 6.73	+53 17 40.8	9.999060
Berkeley	94	+37 52 23.5	+ 8 9 2.80	+ 80.34	+37 41 9.8	9.999458
Berlin-Babelsberg <sup>6</sup> ) .	82	+52 24 24.2	- o 52 25.49	— 8.6 <sub>1</sub>	+52 13 11.1	9.999089
Berlin (Urania)7)	47	+52 31 30.7	- o 53 27.40	<b>—</b> 8.78	+52 20 18.3	9.999084
Bern	573	+46 57 8.7	- o 29 45 <b>.</b> 55	- 4.89	+46 45 34.5	9.999261
Besançon	312	+47 14 59.0	— o 23 57.1	- 3.93	+47 3 25.3	9.999236
Blaca	280	+43 17 37	- г 6 8.0	— 10.86	+43 6 3	9.999334
Bloemfontein Filiale d.	1490	-29 5 45	- I 44 57	<b>— 17.24</b>	-28 55 55	9.999758
Bloemfontein Boyden Stat.	1379	-29 12	- I 45 57	- 17.40	<b>−29</b> 2	9.999748
Bogota	2640	+ 4 35 55.2	+ 4 56 19.51	+ 48.68	+ 4 34 4.4	0.000111
Bologna Zentr. d. Sternw.	84	+44 29 52.8	- o 45 24.48	7.46	+44 18 17.3	9.999290
Bombay (Colaba)	19	+18 53 36.2	- 4 51 15.60	- 47.8 <sub>5</sub>	+18 46 31.1	9.999849
Bonn Zentr. d. Sternw	62	+50 43 45.0	- o 28 23.18	- 4.66	+50 32 22.7	9.999130
Bordeaux (Floirac)	73	+44 50 7.2	+ 0 2 6.56	+ 0.35	+44 38 31.6	9.999281
Boston (University) <sup>8</sup> ) Bothkamp <sup>9</sup> )	31	+42 20 58	+ 4 44 19.1	+ 46.71	+42 9 25.6	9.999341
Breslau Zentr. d. Sternw.	32	+54 12 9.6	— о 40 31.2 — т 8 8.72	- 6.65	+54 1 8.8	9.999042
Breslau Neue Sternw. 10).	147	+51 6 56.5 $+51$ 6 42.1	$-1 & 6.72 \\ -1 & 8 & 21.22$	-	+50 55 36.1 +50 55 21.7	9.999126
,	11/					9.999130
Brisbane	51	<i>−27 28 23.</i> 0	—10 12 6.48		-27 18 54.6	9.999694
Brüssel (Alte Sternw.) Pass. Instr.	56	+50 51 10.7	- o 17 28.71		+50 39 49.0	9.999126
Brüssel (Uccle) MerKr.	105	+50 47 54.6	— o 17 26.05		+50 36 32.7	9.999131
Budapest UnivSternw.	110	+47 29 34.7		- 12.53	+47 18 1.5	9.999215
Budapest-Svábhegy.	474	+47 29 58.5	- I 15 51.47	— <b>12.4</b> 6	+47 18 25.3	9.999240

<sup>1)</sup> Dudley Observatory, seit Juni 1893. Alte Sternwarte 37''0 nördlich, 7º10 östlich. — 2) Alte Sternwarte 3'.8 südlich, 8º östlich. — 2) Seit Oktober 1872, früher in Florenz. — 4) 1927 geschlossen und nach Bloemfontein verlegt. — 5) J. Comas Solá. — 1) Die Koordinaten beziehen sich auf die Mitte der großen Kuppel, in der der große Refraktor aufgestellt ist. Die frühere Sternwarte in Berlin (seit 1835) lag 5' 52''.5 nördlich und 1m 9º31 östlich. — 2) Übungssternwarte der Universität. — 1) Die alte Sternwarte lag 4º1 östlich, 34''.5 nördlich. — 9) Herr von Bülow. — 10) Geogr. Breite des Vertikalkreises, Länge des Durchgangsinstruments.

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. p inel. Seehöhe
Budapest <sup>1</sup> ) Bukarest (Mil. Geogr. Inst.)	110	+47 28 49" +44 24 34.2	-i 16 13.7 -1 44 27.01	-12.53 -17.16	+47 17 16" +44 12 58.7	9.999215 9.999292
Cambridge Engl	28	+52 12 51.6	-o o 22.75	- 0.06	+52 1 37.3	9.999090
Cambridge Mass. <sup>2</sup> )	24	+42 22 47.6	+4 44 31.05	+46.74	+42 11 15.1	9.999340
Cap d. gut. Hoffnung	10	-33 56 6.8	—т 13 54.60	-12.14	-33 45 23.2	9.999547
Caracas (Observ. Cajigal) .	1042	+10 30 24.3	+4 27 42.61	+43.98	+10 26 15.6	0.000023
Castel Gandolfo	_	+41 44 48	-0 50 36.4	- 8.31	+41 33 17	9.999354
Catania	47	+37 30 13.3	—I o 20.60	- 9.9 <b>1</b>	+37 19 1.9	9.999466
Charkow	139	+50 0 9.9	-2 24 55.72	-23.81	+49 48 44.4	9.999153
Charlottenburg, Techn.	, '60	+52 30 48.7	-o 53 20.5	<b>—</b> 8.76	+52 19 36.2	9.999085
Charlottesville <sup>3</sup> )	259	+38 2 1.2	+5 14 5.33	+51.60	+37 50 46.5	9.999464
Christiania (Oslo) MerKr.	25	+59 54 43.7	-0 42 53.51	— 7 <b>.</b> 04	+59 44 39.2	9.998908
Cincinnati (Alto Sternw.).	_	+39 6 26.5	+5 37 59.09	+55.52	+38 55 6.0	9.999421
Cincinnati (Neue Sternw.)4)	247	+39 8 19.8	+5 37 41.40	+55.47	+38 56 59.1	9.999437
Cleveland (Case Obs.)	215	+41 30 14.5	+5 26 25.86	+-53.63	+41 18 44.3	9.999375
Coimbra	99	+40 12 24.5	+0 33 43.1	+ 5.54	+40 0 58.9	9.999400
Columbia Missouri <sup>5</sup> ) .	225	+38 56 12	+6 9 18.37	+60.67	+38 44 52.3	9.999442
Cordoba	434	-31 25 15.5	+4 16 47.16	+42.18	<i>−</i> 31 14 57.5	9.999635
Danzig (Naturf. Ges.)	30	+54 21 18.0	—1 14 39.6	-12.26	+54 10 18.4	9.999036
Danzig (Städt. Sternw.) .	30	+54 21 37.9	-ı 14 36.5	-12.26	+54 10 38.3	9.999036
Delaware (Perkins Obs.) .	270	+40 15 4	+5 32 13.33	+54.58	+40 3 38	9.999410
Denver <sup>6</sup> )	1644	+39 40 36.4	+6 59 47.72	+68.96	+39 29 13.1	9.999519
Dorpat (Tartu, Jurjew) MerKr.	67	+58 22 47.2	—ı 46 53.18	-17.56	+58 12 25.1	9.998946
Dresden (Geodät. Inst.) .	168	+51 1 49.3	-0 54 55.I	- 9.02	+50 50 28.5	9.999130
Dresden (Mathem. Salon) .	_	+51 3 14.7	<b>−</b> ∘ 54 55.83	<b>-</b> 9.02	+50 51 54.0	9.999117
Dublin (Dunsink Obs.)	86	+53 23 13.1	+0 25 21.1	+ 4.17	+-53 12 6.4	9.999065
Düsseldorf (Bilk)	46	+51 12 25.0	-0 27 2.69	- 4.44	+51 1 5.1	9.999117
Dunlap Obs. (Toronto).  Durban	244	+43 51 46 -29 50 46.6	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	+52.19 $-20.37$	+43 40 II -29 40 47.0	9.999317
Durban	79 108	+54 46 6.2	+0 6 19.75	+ 1.04	+54 35 9.8	9.999645
Edinburgh	146	+55 55 30	+0 12 44.1	+ 2.09	+55 44 43.5	9.999008
Edinburgh (Blackf. Hill). Evanston (Dearborn Obs.)	134	+55 55 28.0	+0 12 44.0 +5 50 42.3	+ 2.09 +57.61	+55 44 41.5 +41 52 1.6	9.999007
Faenza (Urania Lamonia).	175 45	+42 3 33.4 +44 17 2	-0 47 33.9	-7.81	+44 5 27	9.999330
						9.999667
	1			1		
		-				
						9.999003
Flagstaff (Lowell Obs.) Florenz (Alte Sternw.) <sup>7</sup> ) Florenz (Mil. Geogr. Inst.) Frankfurt a. M Genf MerKr Genua (Mar. Sternw.) MerKr Georgetown D. C Glasgow Schottl	73 72 121 406 108 62 55	+35 12 30.5 +43 46 4.1 +43 46 49.4 +50 7 0 +46 11 59.3 +44 25 8.1 +38 54 26.2 +55 52 42.1	+7 26 44.6 -0 44 59.6 -0 45 2.5 -0 34 36.3 -0 24 36.53 -0 35 41.28 +5 8 18.33 +0 17 10.55	+73.39 - 7.40 - 5.70 - 4.04 - 5.86 +50.65 + 2.82	+35 I 35.8 +43 34 29.2 +43 35 I4.5 +49 55 34.6 +46 0 24.I +44 I3 32.6 +38 43 6.7 +55 4I 55.2	9.99930 9.99930 9.99914 9.99926 9.99943

<sup>1)</sup> Observ. der Kgl. Josef-Technischen Hochschule. — 2) Harvard College Observatory. — 2) Leander Mc. Cormick Observatory, University of Virginia. — 4) Mount Lookout seit 1873. — 6) Laws Observatory. — 6) University Park, Chamberlin Observatory. — 7) 1872 nach Arcetri verlegt.

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Göttingen MerKr	161	+51°31′48″.2	-0 39 46.22	- 6 <sup>8</sup> .53	+51 20 30.0	9.999117
Gotha (Neue Sternw.)1)	322	+50 56 37.9	-0 42 50.51	— 7.04	+50 45 16.7	9.999142
Graz	375	+47 4 37.2	-r r 47.71	-10.15	+46 53 3.2	9.999244
Greenwich Transit Circle .	47	+51 28 38.2	0 0 0.00	0.00	+51 17 19.7	9.999110
Groningen	4	+53 13 13.8	-0 26 15.11	4.31	+53 2 6.0	9.999064
Grünwald <sup>2</sup> )	599	+48 2 7	-0 46 6.55	- 7.58	+47 50 35	9.999235
Hamburg (Alte Sternw.)3)	25	+53 33 6.0	-o 39 53.60	- 6.55	+53 22 0.4	9.999057
Hamburg (D. Seewarte) .	30	+53 32 51.8	-0 39 53.42	- 6.55	+53 21 46.2	9.999058
Hanover N. H	183	+43 42 15.3	+4 49 8.00	+47.50	+43 30 40.5	9.999317
Haverford	116	+40 0 40.1	+5 1 12.7	+49.48	+39 49 15.4	9.999406
Heidelberg (Wolfs Sternw.)	126	+49 24 35	-0 34 48.4	- 5.72	-+49 13 7	9.999159
Heidelberg (Königst.)	570	+49 23 54.6	-0 34 53.13	<i>−</i> 5.73	+49 12 26.8	9.999198
Helsingfors MerKr	33	+60 9 42.3	-1 39 49.10	—16.40	+59 59 40.8	9.998903
Helwan	115	+29 51 31.1	-2 5 21.77	-20.59	+29 41 31.4	9.999648
Herrsching (München)	534	+47 59 55	-0 44 43.6	- 7.35	+47 48 23	9.999231
Hongkong	33	+22 18 13.2	-7 36 41.25	-75.02	+22 10 5.8	9.999793
Hyderabad-Deccan <sup>4</sup> ).	554	+17 25 54.3	-5 13 48.98	-51.55	+17 19 17.7	9.999907
Innsbruck	605	+47 16 6.5	-0 45 31.42	— 7 <b>.</b> 48	+47 4 32.8	9.999254
Istanbul (Univ. Sternw).	65	+41 0 45	—I 55 52	-19.03	+40 49 16	9.999377
Jena (Univers.) Zentr. d. St.	164	+50 55 35.6	-0 46 20.22	— 7.61	+50 44 14.3	9.999131
Jena (Winkler)	174	+50 56 15.7	-0 46 20.73	— 7.61	+50 44 54.5	9.999132
Johannesburg	1786	-26 10 52.1	1 52 17.9	-18.45	-26 I 42.0	9.999839
Johannesburg (Fil. d. Yale Observ.)	1741	-26 II I4	-I 52 7	-18.42	-26 2 4	9.999836
Kairo	-	+30 4 38.2	<b>−</b> 2 5 8.80	-20.56	+29 54 35.8	9.999635
Kalocsa5)	102	+46 31 42.4	—I I5 54.34	-12.47	+46 20 7.6	9.999239
Karlsruhe <sup>6</sup> )	IIO	+49 0 29.6	-o 33 35.40	-5.52	+48 49 0.4	9.999177
Kasan (Univers.)	79	+55 47 24.3	-3 16 29 <b>.</b> 03	-32.28	+55 36 36.6	9.999007
Kasan (Engelhardt)	98	+55 50 20.5	<u>-3 15 15.74</u>	-32.08	+55 39 33.2	9.999007
Kew	10	+51 28 6	+0 1 15.1	+ 0.21	+51 16 47.5	9.999108
Kiel Neuer MerKr	52	+54 20 27.6	-0 40 35.45	— 6.6 <sub>7</sub>	+54 9 27.9	9.999040
Kiel Alter MerKr.	47	+54 20 28.5	-0 40 35.57	- 6.67	+54 9 28.8	9.999040
Kiew MerKr	184	+50 27 11.8	-2 2 0.56	-20.04	+50 15 48.3	9.999145
Kital	658	+39 8 1.7	-4 27 3I.7	-43.95	+38 56 41.0	9.999465
Kodaikanal	2343	+10 13 50	-5 9 52.0	<del>-50.94</del>	+10 9 47.6	0.000114
Königsberg Reps. 7).	22	+54 42 50.6	-I 2I 58.98	-13.47	+54 31 53.8	9.999029
Konstanz <sup>8</sup> )	420	+47 39 43.6	-0 36 42.01	— 6.o <sub>3</sub>	+47 28 10.7	9.999232
Kopenhagen (Neue 9).	14	+55 41 12.6	-0 50 18.69	- 8 <b>.2</b> 6	+55 30 24.0	9.999005
Kopenhagen (Urania- Sternw.)	10	+55 41 19.2	-0 50 9.11	- 8 <b>.2</b> 4	+-55 30 30.6	9.999005
Krakau MerKr	221	+50 3 51.9	-I 19 50.28	-13.11	+49 52 26.7	9.999158
Kremsmünster MerKr.	384	+48 3 23.1	-0 56 31.58	- 9.28	+-47 51 51.1	9.999219

<sup>1)</sup> Selt 1857, früher Seeberg. — 1) Privatsternwarte von Ph. Fauth. — 2) 1909 nach Bergedorf verlegt. — 4) Nizamiah Observatory. — 5) Erzbischöfl. Haynaldsche Sternwarte. — 6) 1896 nach Heidelberg verlegt. — 7) Nach 1898, vor 1898 0901 westlich. — 6) Privatsternwarte von E. Leiner. — 9) Seit 1861 Nov. 11. Alte Sternwarte 20'13 südlich, 0803 westlich.

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Kyoto (Astron. Inst.)	55	+35 1 37.1	-9 3 7.0	-89.22	+34 50 43.9	9.999525
Kyoto (Kwasan Observ.)	220	+34 59 40.3	-9 3 IO.24	-89.23	+34 48 47.4	9.999537
La Plata MerKr. Gautier	17	-34 54 30·3	+3 51 43.74	+38.07	-34 43 38.I	9.999525
T . 1 (Neue Sternw.)13	6	+52 9 19.8	-0 17 56.15	- 2.94	+51 58 5.2	9.999090
Leiden MerKr.  Leipzig (Neue Sternw.)2)  Zentr.	119	+51 20 5.9	-o 49 33·93	- 8.14	+51 8 46.7	9.999119
Lembang (Bosscha St.)	1300	- 6 49 29.I	—7 10 27.8I	-70.71	- 6 46 45.5	0.000068
Ů.	1300	0 49 29.1				0.000000
Lemberg (Techn. Hochsch.)	340	+49 50 11.2	—ı 36 3.40	-15.78	+49 38 45.0	9.999171
Leningrad (Petersburg) .	20	+59 56 29.7	-2 I I3.35	-19.91	+59 46 25.5	9.998907
Leningrad (Petersburg) .	4	+59 56 32.0	-2 1 11.3	-19.91	+59 46 27.8	9.998906
Lissabon (Tapada)	94	+38 42 30.5	+0 36 44.68	+ 6.04	+38 31 12.0	9.999437
Lissabon (Mar. Sternw.) .		+38 42 17.6	+0 36 33.6	+ 6.01	+38 30 59.2	9.999431
Liverpool (Neue Sternw.)3)	62	+53 24 4.8	+0 12 17.33	+ 2.02	+53 12 58.2	9.999063
London (Mill Hill) (Obs. of Univ.)	82	+51 36 46.3	+0 0 57.77	+ 0.16	+51 25 28.6	9.999109
Lourenço Marques	60	-25 58 5·5	-2 10 22.63	-21.42	-25 48 58.9	9.999725
Lübeck (NavigSch.)	19	+53 51 31.1	-0 42 45.6	- 7.02	+53 40 27.8	9.999049
Lund Zentr. d. Sternw	34	+55 41 51.6	-o 52 44.97	- 8.66	+55 31 3.1	9.999006
Lüttich Ougrée	128	+50 37 6	-O 22 12	-3.65	+50 25 43	9.999137
Lyon	299	+45 41 40.8	-o 19 8.5	- 3.14	+45 30 5.3	9.999274
Madison (Washburn Observ.)	292	+43 4 36.8	+5 57 37.90	+58.75	+42 53 2.9	9.999340
Madras	7	+13 4 8.0	-5 20 59.65	-52.73	+12 59 2.5	9.999926
Madrid Zentr. d. Sternw	656	+40 24 30.1	0 14 45.09	+ 2.43	+40 13 3.7	9.999433
Mailand, Brera	120	+45 27 59.2	<b>-0</b> 36 45.89	- 6.04	+45 16 23.6	9.999268
Manila	3	+14 35 25	<b>-8</b> 3 50	-79.48	+14 29 47	9.999908
Mannheim Zentr.d. Sternw.	98	+49 29 11.0	—o 33 50.42	<b>—</b> 5.56	+49 17 43.5	9.999164
Marburg	248	+50 48 46.9	-0 35 4.9	-5.76	+50 37 25.0	9.999141
Mare Island Calif	18	+38 5 55.8	+8 9 5.63	+80.35	+37 54 40.8	9.999447
Markree (Col. Cooper)	45	+54 10 31.7	+0 33 48.4	+ 5.56	+53 59 30.7	9.999043
Marseille (Neue Sternw.) 4)	75	+43 18 19.1	-0 2I 34.56	- 3.54	+43 6 44.8	9.999320
McDonaldObservatory	2070	+30 40 13	+6 56 6.3	+68.36	+30 30 4	9.999763
(Mount Locke) Melbourne	28	-37 49 53.4	-9 39 54.17	-95.26	-37 38 39.9	9-999454
Merate (Filiale v. Mailand,	380	+45 41 54.1	-0 37 42.85	- 6.20	+45 30 18.6	9.999279
Meudon	162	+48 48 18	-0 8 55.5	- I.46	+48 36 48	9.999185
Middletown, Conn	70	+41 33 18	+4 50 38.2	+47.74	+41 21 47.6	9.999364
Mizusawa	61	+39 8 3.4	-9 24 31.46	-92.74	+38 56 42.7	9.999424
Modena	63	+44 38 52.8	-0 43 42.8	- 7.18	+44 27 17.2	9.999285
Montreal	57	+45 30 20	+4 54 18.63	+48.35	+45 18 44.4	9.999263
Mt. Hamilton (Liek)	1283	+37 20 25.3	+8 6 34.86	+79.94	+37 9 14.9	9.999552
Mt. Wilson Calif	1742	0.	+7 52 14.33	+77.57	+34 2 13.3	9.999659

<sup>1)</sup> Seit 1860. Alte Sternwarte 8%0 nördlich, 0,42 östlich. — 2) Seit 1861. Alte Sternwarte 14%2 nördlich, 4,00 westlich. — 3) Alte Sternwarte 30%1 südlich, 6,2 westlich; Seehöhe 29m.

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Moskau MerKr.  Mundenheim¹)  München (West-Kuppel)  Münster  Nashville (Vanderbilt Obs.)  Neapel (Capo di Monte)  Neuchâtel Refraktor  New Haven (Neue Stw.)²)  New York (Rutherfurd)	142 <sup>m</sup> - 529 75 174 154 488 40 -	+55 45 19.5 +49 27 30 +48 8 45.5 +51 57 45.8 +36 8 58.2 +40 51 45.7 +46 59 49.5 +41 19 22.3 +40 43 48.5	-2 30 17.03 -0 33 44 -0 46 26.02 -0 30 29.66 +5 47 12.81 -0 57 1.40 -0 27 49.77 +4 51 40.58 +4 55 56.66	* -24.69 - 5.54 - 7.63 - 5.01 +57.04 - 9.37 - 4.57 +47.92 +48.62	+55 34 31.5 +49 16 2 +47 57 13.8 +51 46 30.0 +35 57 56.1 +40 40 17.6 +46 48 15.4 +41 7 52.7 +40 32 20.9	9.999012 9.999158 9.999227 9.999100 9.999506 9.999387 9.999254 9.999368 9.999380
New York (Columb. Obs.) Nikolajew MerKr Nizza Kl. MerKr. <sup>3</sup> )	55 378	+40 45 23.1 +46 58 19.3 +43 43 16.9	+4 55 53.73 -2 7 53.98 -0 29 12.15	+48.61 -21.01 - 4.79	+40 33 55.4 +46 46 45.1 +43 31 42.0	9.999379 9.999225 9.999330
Northfield (Goodsell Obs.) Oakland Californ. 4). Oak Ridge (Filiale d.) Odessa (UnivStw.) MerKr. Odessa (Filiale Pulkowa).	290 99 183 55	+44 27 41.4 +37 47 +42 30 13 +46 28 36.2 +46 28 36.0	+6 12 35.94 +8 8 48 +4 46 14.2 -2 3 2.05 -2 3 2.19	+61.21 +80.30 +47.02 -20.21 -20.21	+44 16 5.9 +37 35 47 +42 18 40 +46 17 1.3 +46 17 1.1	9.9993°5 9.99946° 9.999347 9.999237 9.999234
Oslo (Christiania) Mer Kr.  Ottawa Mer Kr.  Oxford (Radel. Obs.)  Oxford (Univers.)  Oxford, Mississippi  Padua  Palermo	25 85 65 64 140 38	+59 54 43.7 +45 23 39.1 +51 45 33.9 +51 45 34.2 +34 22 12.6 +45 24 1.2 +38 6 44.0	-0 42 53.51 +5 2 51.98 +0 5 3.0 +0 5 0.4 +5 58 7.18 -0 47 29.15 -0 53 25.87	- 7.04 +49.75 + 0.83 + 0.82 +58.83 - 7.80 - 8.78	+59 44 39.2 +45 12 3.5 +51 34 17.0 +51 34 17.3 +34 11 25.1 +45 12 25.6 +37 55 28.9	9.998908 9.999267 9.999104 9.999546 9.999263 9.999451
Paris (Obs. nat.) Mer. Cassini Paris (Montsouris) westl. Mer. Peking Perkins Obs. (Delaware) Perth, West-Austr Petersburg (Leningrad)	72 59 - 270 60 20	+48 50 11.2 +48 49 18.0 +39 54 23.0 +40 15 4 -31 57 10.7 +59 56 29.7	-0 9 20.93 -0 9 20.6 -7 45 52.87 +5 32 13.33 -7 43 21.62 -2 1 13.35	- 1.53 - 1.53 - 76.53 +54.58 - 76.12 - 19.91	+48 38 41.5 +48 37 48.2 +39 42 58.7 +40 3 38 -31 46 46.9 +59 46 25.5	9.999451 9.999177 9.999174 9.999401 9.999597 9.998907
Petersburg (Leningrad) (Univers.) Philadelphia <sup>5</sup> ). Pie du Midi (Filiale v.) Plonsk <sup>6</sup> ). Pola. Porto Alegre <sup>7</sup> ) MerKr Posen	4 74 2850 — 32 — 85	+59 56 32.0 +39 58 2.1 +42 56 31.5 +52 37 40.0 +44 51 48.6 -30 I 51 +52 23 48.6	-2 I II.3 +5 I 6.88 -0 0 34.29 -I 2I 3I.9 -0 55 23.07 +3 24 53.2 -I 7 30.60	-19.91 +49.47 - 0.09 -13.39 - 9.10 +33.66 -11.09	+59 46 27.8 +39 46 37.5 +42 44 57.8 +52 26 28.2 +44 40 12.9 -29 51 49 +52 12 35.4	9.998906 9.999404 9.999518 9.999078 9.999277 9.999636 9.999090

<sup>&</sup>lt;sup>2</sup>) Dr. Max Mündler. — <sup>2</sup>) Yale University. Alte Sternwarte 45''8 südlich, 1.58 westlich. — <sup>3</sup>) Herr R. Bischofsheim. — <sup>4</sup>) Chabot Observatory. — <sup>5</sup>) Flower Obs. (Univ. of Pennsylvania). — <sup>6</sup>) Dr. Jedrzejewicz; 1898 nach Warschau verlegt. — <sup>7</sup>) Observatorio Regional do Rio Grande do Sul.

#### Koordinaten der Sternwarten

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Potsdam (Astrophys. Obs.).	97	+52° 22′ 56″.0	- 0 52 15.86	- 8.58	+52° II '42"7	9.999091
Potsdam (Geod. Inst.) Turm	99	+52 22 54.8	- o 52 16.11	-8.58	+52 11 41.5	9.999091
Poughkeepsie <sup>1</sup> )	61	+41 41 18	+ 4 55 35.2	+48.56	+41 29 47	9.999360
Prag (UnivStw.) Turm	197	+50 5 16.0	- o 57 40.29	<b>−</b> 9.47	+49 53 50.9	9.999155
Prag (Safarik)		+50 4 24	- o 57 48	- 9.49	+49 52 59	9.999142
Princeton N. J. (N.Stw.) <sup>2</sup> )	75	+40 20 55.8	+ 4 58 39.44	+49.06	+40 9 29.7	9.999395
Providence <sup>3</sup> )	171	+41 49 46.4	+ 4 45 37.64	-1-46.92	+41 38 15.2	9.999363
Pulkowa Zentr. d. Stw	75	+59 46 18.5	- 2 I 18.57	-19.93	+59 36 12.3	9.998914
Pulsnitz <sup>10</sup> )	284	+51 10 54.6	- o 56 4.18	- 9.21	+50 59 34.6	9.999134
Quebec Canada	90	+46 47 59.2	+ 4 44 52.71	+46.80	+46 36 24.8	9.999231
Quito	2846	- o 14 o	+ 5 13 58.20	+51.58	- o 13 54	0.000194
Riga (Polytechnikum) Turm	_	+56 57 7	— I 36 28.II	-15.84	+56 46 30	9.998974
Rio de Janeiro	63	-22 54 23·7	+ 2 52 41.52	+-28.37	-22 46 6.0	9.999784
Rio de Janeiro (N. Stw.)	33	-22 53 42.1	+ 2 52 53.6	+28.40	-22 45 24.7	9.999782
Rom (Coll. Rom.) MerKr.	59	+41 53 53.6	- o 49 55.36	- 8.19	+41 42 22.3	9.999752
Rom (Capitol) MerKr	65	+41 53 33.2	- 0 49 56.34	- 8.20	+41 42 1.9	9-999355
Rom (Vatican) MerKr. 9)	100	+41 54 12.4	- o 49 48.26	- 8.18	+41 42 41.1	9.999357
Rousdon	157	+50 42 38	+ 0 11 58.9	+ 1.96	+50 31 16	9.999137
Rugby	119	+52 22 30	+ 0 5 2.0	+ 0.83	+52 11 16.7	9.999093
St. Louis Missouri	_	+38 38 3.6	+ 6 0 49.15	+59.28	+38 26 45.5	9.999433
Saltsjöbaden (Stockholms Observator.)	55	+59 16 18	1 13 14	-12.03	+59 6 6	9.998924
San Fernando		+36 27 42.0	+ 0 24 49.30	+ 4.08	+36 16 37.7	9.999488
San Francisco <sup>4</sup> )	30	+37 47 28.0	+ 8 9 42.81	+80.45	+37 36 14.8	9.999453
Santiago de Chile (N. St.)	580	-33 33 44.2	+ 4 42 46.0	+46.44	$-33 \ 23 \ 4.1$	9.999595
Santiago de Chile (A. St.)	619	-33 26 25.4	+ 4 42 36.9	+46.42	-33 15 46.4	9.999600
Setif	1120	+36 11 10	- 0 21 38.6	-3.55	+36 0 7.7	9.999569
Simeïs		+44 24 11.6	- 2 15 59.38	-22.34	+44 12 36.1	9.999309
	360	+42 41 51	- I 33 I9.87	-15.33	+42 30 18	9.999312
Sofia (Mil. Geogr. Jnst.) Sofia (Universitätssternwarte)	555	+42 41 1.7	- I 33 23.3	-15.34	+42 29 28.5	9.999369
Sonneberg (Hoffmeister).	572 405	+50 21 29.5	- 0 44 42.87	-7.34	+50 10 5.5	9.999363
Sonneberg (Erbisbühl).	640	+50 22 41.4	- 0 44 46.19	- 7·36	+50 II 17.5	9.999178
South Hadley			+ 4 50 19	+47.69	+42 3 45.9	9.999346
Stalina bad (Tadjik Observ.)	76	+42 I5 I8.2 +38 33 30	-4356.2	-45.19	+38 22 12	9.999434
Stara Dala <sup>5</sup> )			- I 12 45.49	-11.95	+47 40 54.9	9.999434
Stockholm (AlteSt.) MKr.6)	113	+47 52 27.3	- I 12 13.97	-11.86		9.998922
Stonyhurst	44 116	+59 20 32.7 +53 50 40.0	+ 0 9 52.7	+ 1.62	+53 39 36.5	9.999056
Straßburg (N.St.). MKr.7)		+48 35 0.4	- o 3I 4.53	- 5.10	+48 23 29.9	9.999190
Swarthmore (Sproul Obs.) Refraktor	63	+39 54 16.2	+ 5 1 25.62	+49.52	+39 42 51.9	9.999405
		-33 51 4I.I	-10 4 49.54	-99 <b>.</b> 36	-33 40 58.2	9.999551
Sydney Sydney (Riverview Coll. Obs.)	44	-33 51 41.1 $-33 49 45.7$	-10 4 49·34 -10 4 37·99	-99.33	-33 39 3.I	9.999552
Tacubaya <sup>8</sup> )	2311	-33 49 45.7 +19 24 17.9	+ 6 36 46.71	+65.18	+19 17 3.0	9.999997
Tartu(Dorpat, Jurjew) MerKr.		+58 22 47.2	- I 46 53.19	-17.56	+58 12 25.1	9.998946
Taschkent MerKr.		+41 19 31.6	- 4 37 IO.88	-45.53	+41 8 2.0	9.999397
LaschkehumerKr.,	475	741 19 31.0	4 3/ 10.88	45.53	41 0 2.0	166666.6

<sup>1)</sup> Vassar College. — 2) Alte Sternwarte 2''o nördlich, 1\*94 östlich; 65<sup>m</sup>. — 3) Seagrave. Ladd Observatory 35'' nördlich, 1\*57 östlich. — 4) Davidson Observatory. — 3) Früher O-Gyalla. — 6) Neue Sternwarte seit 1931 in Saltsjöbaden. — 7) Seit Aniang 1881. — 3) Seit März 1883, früher in Chapultepec. — 6) 1933 nach Castel Gandolfo verlegt. — 10) Privatsternwarte des Herrn Classon.

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Teramo (Cerulii)	m	0 , "	h m e	- g.02	0 / "	2 222220
Tokio MerKr	398	+42 39 27"	- o 54 55.8		+42 27 54	9.999358
Toronto (Univ. Obs.)	57	+35 40 19	- 9 18 9.90	91.69	+35 29 21	9.999509
m	110	+43 39 46.0	+ 5 17 34.70	+ 52.17	+43 28 11.2	9.999313
Tortosa (Ebro-Stw.) MKr.	244	+43 51 46	+ 5 17 41.3	+ 52.19	+43 40 11	9.999317
Toulouse MerKr	54	+40 49 14	- o 1 58	- 0.32	+40 37 46	
	195	+43 36 44.0	— o 5 51.01	- 0.96	+43 25 9.3	9.999329
Triest (R. Oss. Astr.)	68	+45 38 35.5	- o 55 4.92	- 9.05	+45 27 0.0	9.999259
Tsingtau (Metastr. Stat.).	-	+36 4 11.3	— 8 I 16.21	<del>- 79.06</del>	+35539.8	9.999496
Tucson Arizona (Steward Obs.)	757	+32 13 59.4	+ 7 23 47.68	- 72.90	+32 3 32.6	9.999638
Turin MerKr	276	+45 4 7.9	- o 3o 47.15	- 5.06	+44 52 32.2	9.999288
Turin (Pino Torinese) .	618	+45 2 16.3	o 3I 6.52	- 5.11	+44 50 40.6	9.999312
Upsala (N. Stw.) PassInstr.	21	+59 51 29.4	— т то зо.тз	- 11.58	+59 41 24.2	9.998909
Urbana Jll	236	+40 6 20.2	+ 5 52 53.90	+ 57.97	+39 54 55.1	9.999412
Utrecht	12	+52 5 9.5	— o 20 31.6	- 3.37	+51 53 54.4	9.999093
Valkenburg (Ignatius Coll.)	100	+50 52 29.3	— o 23 19.91	-3.83	+50 41 7.8	9.999129
Venedig	15	+45 26 10.5	- o 49 22.I2	— 8.11	+45 14 34.9	9.999261
Victoria B.C. (Dominion Obs.)	229	+48 31 15.7	+ 8 13 40.17	+ 81.18	+48 19 45.0	9.999197
Warschau <sup>1</sup> ) Zentr. d. Stw.	121	+52 13 4.6	— I 24 7.25	— 13.8 <sub>2</sub>	+52 1 50.3	9.999097
Warschau <sup>2</sup> )	_	+52 13 10	— I 24 4.8	- 13.81	+52 I 56	9.999088
Warschau (Techn. Hochsch.)	144	+52 13 21.5	— I 24 2.4	— 13.81	+52 2 6.8	9.999098
Washington (Alte Stw.) .	31	+38 53 38.9	+ 5 8 12.13	+ 50.63	+38 42 19.4	9.999428
Washington (Neue Stw.).	82	+38 55 14.0	+ 5 8 15.78	+ 50.64	+38 43 54.4	9.999431
Washington (Kath. Univ.)	_	+38 56 14.8	+ 5 8 0.0	+ 50.60	+38 44 55.1	9.999425
Wellington Transit Instr.3)	127	-4I I7 3.8	-II 39 4.27	-114.84	-41 5 34·3	9.999375
West Point N. Y.(N.Stw.)4)	170	-+41 23 22.1	+ 4 55 50.6	+ 48.60	<b>-41 11 52.3</b>	9.999375
Wien (Alte Sternw.)	167	+48 12 35.5	- I 5 3I.6I	<b>— 10.76</b>	+48 1 3.9	9.999201
Wien (Josephstadt) <sup>5</sup> )	214	+48 12 53.8	- I 5 25.17	<b>— 10.74</b>	+48 1 22.2	9.999204
Wien (Neue Sternw.) Zentr-	240	+48 13 55.3	- I 5 21.35	- 10.73	+48 2 23.8	9.999205
Wien (Ottakring) <sup>6</sup> )	285	+48 12 46.7	— I 5 10.97	— IO.7I	+48 1 15.1	9.999209
Wien (Mil. Geogr. Inst.) .	211	+48 12 40.5	— I 5 26.24	- 10.75	+48 I 8.9	9.999203
Wien (Techn. Hochschule) .	198	+48 11 58.3	— I 5 29.76	— <b>10.</b> 76	+48 0 26.7	9.999204
Wilhelmshaven MerKr.	9	+53 31 52.1	- 0 32 35.15	- 5.35	+53 20 46.4	9.999057
Williams-Bay Wisc. 7).	334	+42 34 12.6	+ 5 54 13.24	+ 58.19	+42 22 39.6	9.999356
Williamstown Mass	213	+42 42 49	+ 4 52 53.5	+ 48.12	+42 31 16	9.999344
Wilna PassInstr	122	+54 40 59.1	— I 4I 8.76	— 16.61	+54 30 2.1	9.999036
Windhuk	_	-22 32	— I 8 14	- 11.21	-22 24	9.999787
Wolfersdorf	279	+50 47 20.0	- 0 46 50.94	<b>—</b> 7.70	+50 35 58.0	9.999143
Zô-se China	100	+31 5 47.6	- 8 4 44·75	- 79.6 <sub>3</sub>	+30 55 33.2	9.999619
Zürich Meridian-Kreis	468	+47 22 38.3	- 0 34 12.3	- 5.62	+47 11 4.8	9.999242

<sup>1)</sup> Universitäts-Sternwarte. — 2) Dr. Jedrzejewicz; seit 1898, früher in Plonsk. — 3) Dominion Observatory. — 4) Seit 1883. Alte Sternwarte 9" nördlich, 152 östlich. — 5) von Oppolzers Sternwarte. — 6) v. Kuffner. — 7) Yerkes Observatory.

# Normalzeiten der wichtigeren Länder

a) An den Meridian von Greenwich angeschlossen

Normalzeit = Mittl. Ortszeit des Meridians	Bezeichnung	Staaten		
östl. Gr.				
11 30 m	<u></u>	Neu Seeland		
10 0	Ostaustralische Z.	Victoria, Neu Süd-Wales, Queensland, Tasmanien		
9 30		Süd-Australien		
9 0		Japan, Korea		
8 0	Ostchinesische Küsten-Z.	Ostküste von China, West-Australien		
7 0	Südchinesische Küsten-Z.	Südküste von China, Franz. Indochina, Siam		
5 30	_	Indien, Ceylon		
4 0	_	Europ. Rußland*) von 40° bis 52° 30' östl. Länge		
3 0	_	Europ. Rußland*) westl. von 40° östl. Länge		
2 45	-	Ostafrika		
2 0	Osteuropäische Z.	Finnland, Estland, Lettland, Bulgarien, Rumä- nien, Griechenland, Türkei, Palästina, Ägyp- ten, Süd-Afrika, Südwest-Afrika		
I O	Mitteleuropäische Z.	Norwegen, Schweden, Dänemark, Deutschland,		
	(M. E. Z.)	Ungarn, Schweiz, Italien, Litauen, Polen,		
		Tschechoslovakei, Jugoslavien, Kamerun		
	Westeuropäische Z.	Belgien, Frankreich, Großbritannien und Irland,		
0 0	(Greenwich Z.)	Luxemburg, Portugal, Spanien, Gibraltar,		
		Algerien		
westl. Gr.				
h m		Island, Madeira, Kanarische Inseln		
I 0				
2 0	_	Azoren, Kap Verdesche Inseln, Grönland-Scores- bysund		
3 0		Ost-Brasilien, Grönland - Westküste und Ang-		
3 0		magsalik		
	_	Argentinien (1. Nov.—Ende Febr.)		
		Uruguay (Nov.—März)		
2 20	_	Uruguay (April—Okt.)		
3 30	Atlantic St. Time	Mittel-Brasilien, Argentinien (1. März-31. Okt.),		
4 0	Tibliancio So. Timo	Canada (Küste), Paraguay, Chile		
4 30	_	Venezuela		
4 33		Bolivien		
5 0	Eastern St. Time	Canada (Quebec, Ontario zwisch. 68° u. 90° westl.),		
5	2000021	Verein.Staat.(Ost-Zone), Panama, Peru,		
		Ecuador, West-Brasilien, Columbien		
6 0	Central St. Time	Zentral-Zone von Canada u. v. d. Verein. Staaten,		
		Mexico, mit Ausnahme des nördl. Teiles		
7 0	Mountain St. Time	Gebirgszone von Canada u. v. d. Verein. Staaten		
8 0	Pacific St. Time	Vereinigte Staaten (Pacifische Küste), Britisch		
		Columbien, nördl. Mexico		
10 30	- 1114 -	Hawaii (Sandwich Inseln)		
10 30	_	Hawaii (Sandwich Inseln)		

<sup>\*)</sup> Im Gebiet der Sowjet-Republiken sind alle Uhren 1 Stunde vorgestellt.

# b) Nicht an den Meridian von Greenwich angeschlossen

	Meridian	Längendifferenz gegen Greenwich
Niederlande	Amsterdam	o 19 32.1 O.

## Besondere Erläuterungen zu den Angaben und zum Gebrauch des Jahrbuchs.

Das Jahrbuch gibt die Örter der Wandelsterne in geozentrischen und in heliozentrischen Koordinaten. Die Zeitpunkte, für die sie gelten, sind in Welt-Zeit ausgedrückt, wenn nicht ausdrücklich eine andere Zeit angegeben wird. Welt-Zeit ist identisch mit Bürgerlicher Zeit Greenwich. Der bürgerliche Tag beginnt um Mitternacht, die Welt-Zeit-Stunden sind von oh bis 24h durchgezählt. Die Beziehung zu der bis zum Jahrgang 1924 (einschließlich) im Jahrbuch verwendeten Mittleren Zeit Greenwich besteht darin, daß der astronomische mittlere Tag erst am Mittag des bürgerlichen Tages, also 12h nach dessen Anfang beginnt. Somit ist 1925 Jan. 1, oh Welt-Zeit gleich 1924 Dez. 31, 12h Mittlere Zeit Greenwich.

Die Örter der Fixsterne sind gegeben als »Mittlere Sternörter«, bezogen auf das mittlere Äquinoktium des Jahresanfangs, und in Ephemeridenform als »Scheinbare Sternörter«, bezogen auf das instantane wahre Äquinoktium.

Zur Erläuterung ist im einzelnen folgendes zu bemerken:

Sonnenephemeride (S. 2-29 und 100-108).

Der erste Teil der Sonnenephemeride (S. 2-19) gibt auf den linken Seiten für o $^{h}$  Welt-Zeit an jedem Tage:

- 1) Die Zeitgleichung = Wahre Zeit minus Mittlere Zeit.
- 2) Die geozentrischen, äquatorialen Koordinaten  $\alpha$ ,  $\delta$  des scheinbaren Sonnenorts, bezogen auf das jedesmalige wahre Äquinoktium, zugleich mit der ersten Differenzenreihe. Diese Angaben sind direkt mit den Beobachtungen vergleichbar. Die Nutationsglieder kurzer Periode sind, wie im Vorwort erwähnt, in den Koordinaten nicht enthalten.
- 3) Die halbe Durchgangsdauer (in Sternzeit) der Sonnenscheibe durch den Meridian.
- 4) Den geozentrischen Halbmesser der Sonnenscheibe, d. i. der Winkel, unter dem der Sonnenhalbmesser vom Erdmittelpunkt aus erscheint.

Die rechten Seiten geben:

- 1) Die Julianische Zeit, d. i. die Anzahl der seit Beginn der Julianischen Periode verflossenen mittleren Sonnentage.
- 2) Die Sternzeit für o<sup>h</sup> Welt-Zeit. In ihr sind, wie im Vorwort erwähnt, nur die langperiodischen Glieder der Nutation enthalten.

Um für einen Erdort der westlichen Längendifferenz  $\Delta\lambda$  (in Stunden) gegen Greenwich die Sternzeit in seiner mittleren Mitternacht zu erhalten, ist zu diesen Angaben hinzuzulegen: 9.8565  $\Delta\lambda$ . Diese Werte finden sich unter der Überschrift: »Korr. der Sternzeit« im Verzeichnis der Sternwarten.

- 3) Die Nutation in Rektaszension getrennt nach langperiodischen und kurzperiodischen Gliedern.
- 4) Die geozentrischen ekliptikalen Koordinaten  $\lambda$ ,  $\beta$  der Sonne, bezogen auf das mittlere Äquinoktium des Jahresanfangs, sowie log R, den Logarithmus der Entfernung R der Erde von der Sonne. Diese Angaben finden bei Bahnberechnungen u. dergl. Verwendung.
- 5) Die bürgerlichen Ortszeiten des Aufgangs und Untergangs der Sonne für einen Ort des Nullmeridians in + 50° Breite; sie sind mit der Horizontalrefraktion 34′ berechnet und gelten für den oberen Rand der Sonne. Um daraus für einen beliebigen anderen Ort zwischen +30° und + 60° geographischer Breite die entsprechenden Angaben zu erhalten, ist die Tabelle S. 330\*, 331\* zu benutzen.

Auf S. 20—28 folgen, bezogen auf das mittlere Äquinoktium des Jahresanfangs, die rechtwinkligen, geozentrischen, äquatorialen Sonnenkoordinaten für o<sup>h</sup> Welt-Zeit mit ihren ersten und zweiten Differenzen. Die gleichen Koordinaten, jedoch bezogen auf das Normaläquinoktium 1950.0, werden auf S. 100—108 gegeben.

Die Werte von X, Y, Z sind auf 6 Dezimalen gegeben. Die Ephemeriden bieten jedoch die Möglichkeit, die Sonnenkoordinaten auch auf 7 Dezimalen zu entnehmen. Zu diesem Zwecke füge man an die 6-stelligen Werte eine Null an und vereinige sie algebraisch mit den Werten von  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$ . Ein ausführliches Beispiel hierfür ist im Jahrgang 1933, S. 362\* gegeben.

Die gleichen Vorschriften gelten für die auf das Normaläquinoktium 1950.0 bezogenen Sonnenkoordinaten auf S. 100—108.

Am Fuß der Seite 28 finden sich die Zeiten für die Anfänge der Jahreszeiten und für die Erdnähe und Erdferne der Sonne.

Die Seite 29 enthält die Aberration, Parallaxe, mittlere Länge  $L_{\odot}$  und mittlere Anomalie  $M_{\odot}$  der Sonne im Intervall von je 10 Tagen.

#### Mondephemeride (S. 30-48).

Die Mondephemeride (S. 30-47) gibt auf den linken Seiten für ob Welt-Zeit:

- 1) Die scheinbare Rektaszension und Deklination des Mondmittelpunktes mit den ersten Differenzen.
  - 2) Die Äquatorial-Horizontalparallaxe  $p_{\mathbb{C}}$  des Mondes.
- 3) Den geozentrischen Mondhalbmesser  $r_{\mathbb{C}}$ , d. i. der Winkel, unter dem der Mondhalbmesser vom Erdmittelpunkt aus erscheint.
  - 4) Die Länge und Breite des Mondes, abgekürzt auf o°001.

Die rechten Seiten enthalten:

- I) Für den oberen Durchgang des Mondes durch den Meridian von Greenwich die genäherten Angaben für die Rektaszension, Deklination und Parallaxe des Mondmittelpunktes, sowie die bürgerliche Greenwicher Zeit dieses Durchgangs, nebst den Änderungen für 1<sup>h</sup> westlicher Längendifferenz.
- 2) Die bürgerlichen Ortszeiten des Aufgangs und Untergangs des Mondes für einen Ort des Nullmeridians in  $+50^{\circ}$  Breite nebst Änderung für  $r^{h}$  westlicher Längendifferenz; sie sind mit der Horizontalrefraktion 34' berechnet und gelten für den oberen Rand des Mondes. Um daraus für einen beliebigen anderen Ort zwischen  $+30^{\circ}$  und  $+60^{\circ}$  geographischer Breite die entsprechenden Angaben zu erhalten, ist die Tabelle S. 332\*, 333\* zu benutzen.

Seite 48 enthält die Zeitangaben für die Phasen und die Erdnähe und Erdferne des Mondes.

#### Ephemeriden der Großen Planeten (S. 49–99 und 109–112).

Die geozentrischen Örter der Planeten sind für Merkur, Venus, Mars, Jupiter, Saturn von Tag zu Tag, für Uranus, Neptun und Pluto von 4 zu 4 Tagen für oh Welt-Zeit mit ihren ersten Differenzen gegeben. Für die Planeten Merkur bis Neptun sind scheinbare, auf das momentane wahre Äquinoktium bezogene Örter gegeben. Die Örter von Pluto sind auf das mittlere Äquinoktium 1950.0 bezogen und sind nicht wegen Aberration korrigiert. Zur bequemeren Vergleichung der Beobachtungen mit der Ephemeride sind bei diesem Planeten Fixsternaberration und Lichtzeit in besonderen Spalten angeführt. Die letzte Spalte gibt die bürgerliche Zeit (Greenwich) der oberen Kulmination in Greenwich.

Die Örter von Pluto sind nach den Elementen XIX von E.C. Bower, Lick Observatory Bulletin 437, unter Berücksichtigung der Störungen durch Jupiter, Saturn, Uranus und Neptun berechnet.

Die scheinbaren	Halb	messer in	der Einheit der Entfernung sind:
Merkur		3.34	Saturn (äquat.) 83"33
Venus		8.41	» (polar) 74.57
Mars		4.68	Uranus 34.28
Jupiter (äquat.)		98.47	Neptun
» (polar)		91.91	

Die heliozentrischen Ephemeriden der Planeten (S. 109–112) geben den Log. des Radiusvector, die Länge, deren Reduktion auf die Bahn und die Breite bezogen auf das mittlere Äquinoktium 1950.0.

 $_{\Im}$ und istellen die Bahnlage für die Epoche 1950.<br/>o und das Normaläquinoktium 1950. <br/>o dar.

Die Genauigkeit und Ausführlichkeit dieser heliozentrischen Angaben sind ihrem Hauptzweck, zur Berechnung der speziellen Störungen zu dienen, angepaßt.

Die beigefügten Werte der Planetenmassen sind die den Tafeln von Newcomb und von Hill zugrunde liegenden. Für die Erde ist

noch besonders zu erwähnen, daß die Masse von »Erde + Mond« gegeben ist, Radiusvector und heliozentrische Länge sich auf den Schwerpunkt des Systems »Erde + Mond« beziehen.

#### Mittlere Örter von 925 Fixsternen (S. 2\*-25\*).

Die mittleren Örter der 925 Fixsterne sind aus den Daten der Veröffentlichung Nr. 54 des Astronomischen Rechen-Instituts mit den daselbst angegebenen Hilfsgrößen für Präzession und Eigenbewegung abgeleitet worden. Nur die mittleren Örter der 20 Polsterne sind durch trigonometrische Übertragung berechnet. Die jährlichen Veränderungen gelten für die Mitte des Jahres.

Ein \* vor dem Namen weist auf eine Anmerkung am Fuß der Seite hin.

Unter Gr. stehen die visuellen Größen, welche aus der »Revised Harvard Photometry« in »Harvard Annals, vol. 50« entnommen sind, sofern nichts anderes bemerkt ist. Wo für einen Stern zwei Größen gegeben sind, beziehen sich diese auf die Komponenten eines Doppelsterns. Die in den Anmerkungen gegebenen Größen für Doppelsternkomponenten und für die Extrema der Veränderlichen sind dem »Henry Draper Catalogue« entnommen.

Die Spektren sind aus dem Draper Katalog übernommen worden. Zusammengesetzte Spektren sind durch + gekennzeichnet. In anderen Fällen beziehen sich, wo 2 Spektren gegeben sind, diese auf die Komponenten eines Doppelsterns.

#### Scheinbare Örter von 579 Fixsternen (S. 26\*-235\*).

Die scheinbaren Rektaszensionen und Deklinationen der Fixsterne sind für den Moment der oberen Kulmination im Meridian von Greenwich gegeben.

Die Ephemeriden der 555 Sterne mit Deklinationen kleiner als 80°, deren scheinbare Örter von 10 zu 10 Sterntagen gegeben sind, enthalten die kurzperiodischen Mondglieder der Nutation nicht. Das Datum des Tages, an welchem zwei Kulminationen stattfinden, ist in kleinem Druck vor der Rektaszensionsspalte angeführt.

Die jährliche Parallaxe ist bei folgenden Sternen berücksichtigt, bei denen sie hinreichend verbürgt erscheint, nämlich:

					**					**
Nr.	59	τ	Ceti	$_{ m mit}$	0.315	Nr.	538	α Centauri	$_{ m mit}$	0.758
Nr.	127	ε	Eridani	»	0.310	Nr.	667	μ Herculis	*	O.III
Nr.	257	α	Can. maj.	*	0.371	Nr.	695	χ Draconis	<b>»</b>	0.118
Nr.	291	α	Can. min.	*	0.312	Nr.	699	α Lyrae	»	0.124
Nr.	295	β	Geminor.	>>	0.101	Nr.	745	α Aquilae	»	0.204
Nr.	444	β	Leonis	*	0.101	Nr.	793	61 Cygni pr.	*	0.300
Nr.	445	β	Virginis	*	0.101	Nr.	819	δ Capricorni	<b>»</b>	0.114
Nr.	470	β	Can. ven.	*	0.107	Nr.	875	Br 3077	»	0.145
Nr.	492	β	Comae	<b>»</b>	0.133					

Von den im B. J. nicht mit Ephemeriden versehenen Sternen des FK 3 besitzen noch folgende hinreichend verbürgte Parallaxen: Nr. 119 e Eridani o''.161, Nr. 135 δ Eridani o''.137, Nr. 217 γ Leporis o''.149 und Nr. 825 ε Indi o''.281.

Die Ephemeriden der auf S. 2\*-24\* eingeklammerten Sterne findet man im Almanaque Nautico.

Es folgen die scheinbaren Örter von 20 Polsternen für jede obere Kulmination. Sie enthalten die kurzperiodischen Mondglieder nicht, jedoch sind deren Werte in besonderen Spalten gegeben.

Am Fuße der Ephemeriden ist der mittlere Ort eines jeden Sternes für den Anfang des Jahres und die Werte von sec  $\delta$  und tg  $\delta$  angegeben, welche bei der Reduktion der Meridianbeobachtungen nach der hierfür am zweckmäßigsten erscheinenden Besselschen Formel gebraucht werden. Ferner sind hier die Größen a, b, a', b' enthalten, mit deren Hilfe die Nutationsglieder kurzer Periode leicht berechnet werden können. Man erhält A'a + B'b in Zeitsekunden, A'a' + B'b' in Bogensekunden.

Auf den Seiten  $226^*-235^*$  sind die scheinbaren, rechtwinkligen Koordinaten von vier polnahen Sternen gegeben. Sie beziehen sich auf ein Koordinatensystem, dessen positive x-Achse nach dem Frühlingspunkt und dessen positive y-Achse nach dem Punkt  $\alpha = 6^h$ ,  $\delta = 0^\circ$  gerichtet ist. Der Zusammenhang zwischen x, y und  $\alpha$ ,  $\delta$  ist gegeben durch die Beziehungen:  $x = \cos \delta \cos \alpha$ ,  $y = \cos \delta \sin \alpha$ . Die Angaben gelten für  $12^h$  Sternzeit Greenwich und enthalten die kurzperiodischen Mondglieder der Nutation nicht, deren Werte jedoch in der letzten Spalte einer jeden Seite unter der Überschrift »Kurzperiod. Nutationsgl. « gegeben sind.

Als Quellen für die Koordinaten und Eigenbewegungen dieser vier Sterne sind benutzt worden:

für BD + 89° 1: L. Courvoisier: Beobachtungen des Sterns BD 89°1 am großen Meridiankreis der Berliner Sternwarte. Astron. Nachr. Bd. 200, 243,

für B D + 89° 3: L. Courvoisier: Ephemeriden der Polsterne BD 89°3 und BD 89°37 für 1923. Astron. Nachr. Bd. 217, 319,

für BD + 89° 37: L. Courvoisier: Neue Position und Eigenbewegung des Polsterns BD + 89° 37. Astron. Nachr. Bd. 230, 71,

für CPD  $-89^{\circ}$  38: Cape Annals Bd. XI, II, 244 für den Ort und eine briefliche Mitteilung für die Eigenbewegung.

Mit den an diesen Stellen gegebenen Werten findet man folgende mittlere Örter für 1940.0:

Name	Gr.	x	Jährliche Veränd. 1940.5	Jährliche Eigenbew.	y	Jährliche Veränd. 1940.5	Jährliche Eigenbew.
В D+89° г	M 10.56	- 270.89	-20.085	-0.024	+ 78.84	-0.073	-0.008
BD+89° 3		- 80.17	-20.240	-0.003	+863.56		
BD+89°37	10.06	-1061.57			-345.23		
CPD-89°38	9.5				-307.43	+0.027	+0.031

Reduktionsgrößen (S. 236\*-276\*).

Auf die scheinbaren Örter der Sterne folgt S. 236\* eine Zusammenstellung der Werte, mit welchen die Reduktionsgrößen der darauf folgenden Tafeln berechnet sind, und der Formeln für die Reduktion auf den scheinbaren Ort.

Die Größen zur »Reduktion auf den scheinbaren Ort« sind in ihrer ersten Form: A, B, C, D, E; A', B' gegeben für 12<sup>h</sup> Sternzeit des Meridians von Greenwich:

1) Auf S. 237\* im Intervall von 10 Sterntagen.

Diese Tafel soll zur Berechnung von Sternephemeriden für die Epochen der Meridiandurchgänge dienen. Wegen ihrer logarithmischen Form und des großen Intervalls ist die Tafel zur Interpolation nicht geeignet. Man wird deshalb zweckmäßig die Interpolation erst nach der Summierung der einzelnen unmittelbar für die Epochen der Tafel berechneten Glieder vornehmen.

2) Auf S. 256\*-264\* für jeden Sterntag. Hier sind die numerischen Werte von A, B, C und D mit ihren Differenzen gegeben und die kurzperiodischen Nutationsglieder A' und B' mit angeführt.

Beiden Tafeln ist in einer Spalte die dem festen Sternzeitmoment jedesmal entsprechende Welt-Zeit vorangestellt; man wird hiernach auf jeden beliebigen Zeitpunkt, gegeben durch Datum, Sternzeit und Längendifferenz gegen Greenwich, übergehen können. Eine weitere Spalte gibt die seit Beginn des annus fictus verflossene Zeit in Bruchteilen des tropischen Jahres.

Die Reduktionsgrößen der zweiten Form: f, log g, G, log h, H, log i und i, sowie f', g' und G' sind auf S. 238\*—255\* von Tag zu Tag für o<sup>h</sup> Welt-Zeit gegeben.

Auch hier findet sich eine Spalte, t überschrieben, welche die seit Beginn des annus fictus verflossene Zeit in Bruchteilen des tropischen Jahres gibt. Ferner ist die Sternzeit Greenwich für o<sup>h</sup> Welt-Zeit gegeben.

Die Seiten mit ungerader Seitenzahl enthalten außer den schon erwähnten f', g', G' noch folgende Größen:

- a)  $\psi$  = Allgemeine Präzession seit Jahresanfang.
- b)  $\Delta \psi = \text{Langperiodische Glieder der Nutation in Länge.}$
- c)  $\Delta \psi' = \text{Kurzperiodische Glieder der Nutation in Länge.}$
- d) ε = Mittlere Schiefe der Ekliptik.
- e)  $\Delta \varepsilon =$  Langperiodische Glieder der Nutation in Schiefe.
- f)  $\Delta \varepsilon' = \text{Kurzperiodische Glieder der Nutation in Schiefe.}$
- g) Die Koeffizienten j und k, welche in den Formeln auf S. 267\* vorkommen.

Die wahre Schiefe erhält man durch Addition der Gesamtnutation ( $\Delta \varepsilon + \Delta \varepsilon'$ ) zu der mittleren Schiefe.

Auf S. 265\* findet sich eine Tafel der Hilfsgrößen zur Berechnung der Präzession von verschiedenen mittleren Äquinoktien bis 1940.0.

S. 266\* enthält eine Tafel der Hilfsgrößen zur Übertragung der Polsternörter von verschiedenen mittleren Äquinoktien auf das mittlere Äquinoktium 1940.0.

Auf S. 267\* sind die Formeln zusammengestellt, mit welchen bei Anschlußbeobachtungen die gemessenen Koordinatendifferenzen der scheinbaren Örter in solche der mittleren Örter für den Jahresanfang übergeführt werden. Die in diesen Formeln auftretenden Koeffizienten j und k sind auf den Seiten 239\*-255\* enthalten und haben die Bedeutung

$$j = 15 g$$
 are 1'  
 $k = 15 h$  are 1',

wobei g und h die auf den Seiten 238\* – 254\* gegebenen Reduktionsgrößen sind.

S. 268\* enthält eine Zusammenstellung der von der Deklination abhängenden Faktoren der Formeln auf S. 267\*.

S. 269\* enthält eine Tafel der numerischen Werte der Funktionen Sinus und Cosinus für in Zeit ausgedrückte Winkel. Ihre Benutzung erleichtert die Berechnung der Formeln auf S. 267\*.

Die Seite 270\* enthält eine Tafel zur Übertragung von Rektaszensions- und Deklinationsdifferenzen vom mittleren Äquinoktium 1940.0 auf das Normaläquinoktium 1950.0. Man findet die auf das Normaläquinoktium 1950.0 bezogene Koordinatendifferenz, indem man an die auf das mittlere Äquinoktium 1940.0 bezogene Rektaszensionsdifferenz die differentielle Präzession  $\Delta p_a^s$  und an die Deklinationsdifferenz die differentielle Präzession  $\Delta p_a^s$  anbringt:

$$\begin{split} & \varDelta p_{\alpha}^{\, \bullet} = a_1 \operatorname{tg} \delta \cdot \Delta \, \alpha^{\mathrm{m}} + a_2 \frac{\mathrm{r}}{\mathrm{r}_5} \sec^2 \delta \cdot \Delta \, \delta', \\ & \varDelta p_{\delta}^{\, \bullet} = d_1 \cdot \Delta \, \alpha^{\mathrm{m}}. \end{split}$$

Die Koeffizienten  $a_1$ ,  $a_2$  und  $d_1$  sind in der Tafel auf S. 270\* enthalten und haben die Bedeutung:

$$\begin{aligned} a_1 &= (n) \text{ arc } \mathbf{I}' \cos \alpha \\ a_2 &= (n) \text{ arc } \mathbf{I}' \sin \alpha \\ d_1 &= -\mathbf{I5} \ (n) \text{ arc } \mathbf{I}' \sin \alpha. \end{aligned}$$

 $\Delta\alpha^{\rm m}$  und  $\Delta\delta'$  sind die auf das mittlere Äquinoktium 1940.0 bezogenen Rektaszensions- und Deklinationsdifferenzen in Zeit- bez. Bogenminuten. Nach den angegebenen Formeln findet man die differentielle Präzession für Rektaszension in Zeitsekunden, diejenige für Deklination in Bogensekunden.

Die auf Seite 271\* gegebenen Größen f, log g und G dienen zur Übertragung der Örter von dem *mittleren* Normaläquinoktium 1950.0 auf das jedesmalige *wahre* Äquinoktium. Die Berücksichtigung des Einflusses der Variatio saecularis bei dieser Übertragung ist durch die Tafeln auf S. 272\* und 273\* gegeben. Diese enthalten in der ersten Reihe einer jeden Vertikalspalte die Werte von 0.500  $\times$  Var. saec. für die mit den Argumenten  $\alpha$  und  $\delta$  gegebenen Örter. Die an zweiter Stelle stehenden

Zahlen einer jeden Vertikalspalte sind die einjährigen Änderungen von  $0.500 \times \text{Var.}$  saec. und sind, wenn erforderlich, bei der Entnahme des Einflusses der Variatio saecularis für den in Frage kommenden Bruchteil des Jahres zu berücksichtigen.

Eine Tafel zur Übertragung von Sternörtern vom mittleren Äquinoktium 1940.0 auf das Normaläquinoktium 1950.0 befindet sich auf den Seiten 274\*—276\*.

Die hier tabulierten Größen sind gerechnet nach den Formeln:

$$A = (n^{s}) \sin a$$

$$D = (n^{r}) \cos a$$

$$B = (m^{s}) - 0.00001818 (n^{s})^{2} \sin 2 a$$

$$\Delta C = \operatorname{arc} tg C - C; \quad C = A tg (\delta_{1940.0} + D)$$

$$P = -15 tg \frac{1}{2} \psi; \quad tg \psi = \sin (n) \sin a tg (\delta_{1940.0} + D)$$

$$a = \alpha_{1940.0} + 90^{0} - (N)$$

Wegen der Größen (m), (n), (n) vgl. S. [5] der "Grundbegriffe der Sphärischen Astronomie" im Jahrbuch für 1916. Falls die auf S. 276\* gegebene Tafel für  $\Delta C$  und P nicht ausreicht, berechne man die Größen nach den vorstehend gegebenen Formeln oder benutze die weiterreichende Tafel in Veröff. d. Astronom. Rech.-Inst. Nr. 49.

#### Sonuenfinsternisse (S. 278\*-281\*),

Bei der Berechnung der Finsternisse des Jahres 1940 sind die Örter von Sonne und Mond um folgende Beträge verbessert worden:

1940 April 7 Sonne; 
$$\Delta \alpha + 1.4$$
  $\Delta \delta + 0.6$  Mond:  $\Delta \alpha + 2.0$   $\Delta \delta$  0.0 Oktober 1 ,  $+1.4$   $-0.6$  ,  $+2.0$   $-1.2$ 

Die bei den Sonnenfinsternissen gegebenen Besselschen Elemente dienen in der folgenden Weise zur Vorausberechnung der Phasenzeiten und der Positionswinkel der Kontakte:

Mit einer Ausgangszeit T (siehe weiter unten) entnimmt man der Elemententabelle die Werte:

x, y,  $\log \sin d$ ,  $\log \cos d$ ,  $\mu$ , l ( $l^{(a)}$  für äußere,  $l^{(i)}$  für innere Berührung),  $\log \tan f$  ( $f^{(a)}$  für äußere,  $f^{(i)}$  für innere Berührung), x' und y'.

Mit ihnen rechnet man das folgende Formelsystem durch:

(1) 
$$\begin{cases} \xi = c \cos \varphi \sin (\mu - \lambda) \\ \eta = s \sin \varphi \cos d - c \cos \varphi \sin d \cos (\mu - \lambda) \\ \zeta = s \sin \varphi \sin d + c \cos \varphi \cos d \cos (\mu - \lambda) \\ \xi' = [7.6398 - 10] c \cos \varphi \cos (\mu - \lambda) \\ \eta' = [7.6398 - 10] \xi \sin d, \end{cases}$$

worin  $\varphi$  die geographische Breite,  $\lambda$  die westliche Länge (von Greenwich) des Beobachtungsortes bezeichnen, s und c aus der Tafel auf S. 336\* zu entnehmen sind.

Alsdann:

(2) 
$$\begin{cases} m \sin M = x - \xi \\ m \cos M = y - \eta \\ n \sin N = x' - \xi' \\ n \cos N = y' - \eta' \end{cases} n > 0$$

Nun berechnet man aus:

(3) 
$$L = l - \zeta$$
 tang  $f$ 

$$L^{(a)} \min l^{(a)} \text{ und } f^{(a)}, L^{(i)} \min l^{(i)} \text{ und } f^{(i)}; \text{ dann aus:}$$
(4)  $\sin \psi = \frac{m \sin (M - N)}{L}$ 

mit  $L^{(a)}$  und  $L^{(i)}$  je zwei Werte  $\psi^{(a_1)}$ ,  $\psi^{(a_2)}$  und  $\psi^{(i_1)}$ ,  $\psi^{(i_2)}$ , von denen der eine zum Eintritt der Erde in den Halb- oder Kernschatten-Kegel, der andere zu ihrem Austritt aus ihm gehört. Diesen vier Werten  $\psi^{(a_1)}$ ,  $\psi^{(i_2)}$  und  $\psi^{(i_1)}$ ,  $\psi^{(i_2)}$  entsprechen vier Werte  $\tau^{(a_1)}$ ,  $\tau^{(a_2)}$  und  $\tau^{(i_1)}$ ,  $\tau^{(i_2)}$  (in Zeitminuten) nach

$$(5) \tau = -\frac{m\cos(M-N)}{n} + \frac{L\cos\psi}{n},$$

um welche die Ausgangszeit T zu verbessern ist, um die Zeit der gesuchten Phase zu erhalten. Ist T die gesuchte Phasenzeit, so wird  $\tau=0$  werden. Man muß daher das Formelsystem (I) bis (5) mit steigenden Näherungen so lange durchrechnen, bis dieser Fall eintritt, d. h. bis das Formelsystem sich schließt. Zu diesem Zweck beginnt man mit einem Näherungswert  $T_1$ , für den man, wenn kein besserer bekannt sein sollte, eine beliebige Zeit nahe der Mitte der Finsternis nehmen mag, und rechnet die erste genäherte Korrektion  $\tau_1$ ; dann wiederholt man die Rechnung mit  $T_2 = T_1 + \tau_1$ , dann mit  $T_3 = T_2 + \tau_2 = T_1 + \tau_1 + \tau_2$  usf. bis sich  $\tau_n = 0$  ergibt.  $T_n$  ist dann die gesuchte Welt-Zeit des Kontaktes, die durch Hinzufügung der Längendifferenz in mittlere Ortszeit zu verwandeln ist. Die Rechnung ist für jede Berührung gesondert durchzuführen.

Die Positionswinkel der einzelnen Phasen, in üblicher Weise vom Punkt größter Deklination nach Osten gezählt, folgen aus den Werten der letzten Näherung (Größen mit dem Index n) nach

$$P=N+\psi.$$

Will man den Winkelabstand Q vom Punkte der größten Höhe haben, so hat man von P noch den parallaktischen Winkel  $\gamma$  abzuziehen, der aus

der aus 
$$p \sin \gamma = \xi \\ p \cos \gamma = \eta \\ p > 0$$
 folgt, also  $Q = P - \gamma$ .

Um die Zeit der größten Phase,  $T_{\max}$ , zu erhalten, hat man die beiden Formelsysteme (1) und (2) mit einem Näherungswerte  $\overline{T}_1$  durchzurechnen, daraus  $\overline{T}_2 = \overline{T}_1 - \frac{m\cos{(M-N)}}{n}$  zu entnehmen und die Rechnung solange fortzusetzen, bis die Korrektion der Ausgangszeit o wird. Als Näherungswert  $\overline{T}_1$  wählt man zweckmäßig das Mittel der beiden Werte von  $T_2$  für die Berührungszeiten.

¹) Wird der Winkel  $\psi$  bei der ersten Näherungsrechnung imaginär, so rechne man  $\tau$  unter der Annahme  $\psi=90^\circ$  aus  $\tau=-\frac{m\cos{(M-N)}}{n}$ ; bleibt  $\psi$  auch in der weiteren Rechnung imaginär, so deutet dies an, daß an dem betreffenden Orte keine Sonnenfinsternis stattfindet.

Die Größe der Verfinsterung i, in Teilen des Sonnendurchmessers ausgedrückt, ergibt sich dann aus:

$$i = \frac{L^{(a)} - m}{2 L^{(a)} - 0.5450}$$

worin  $L^{(a)}$  und m die zur Zeit  $T_{\text{max}}$  gehörigen Werte bedeuten.

#### Merkurdurchgang (S. 282\*)

Bei der Berechnung des Merkurdurchganges ist keine Korrektion am Sonnenort angebracht worden.

#### Sternbedeckungen (S. 283\*-290\*).

Auf den Seiten 283\*-290\* sind Angaben über die Stern- und Planetenbedeckungen enthalten, die in Berlin-Babelsberg, Breslau, Frankfurt a. M., Königsberg und München sichtbar sind. Außer der genäherten Welt-Zeit des Ein- und Austrittes ist unter P der Positionswinkel des Sterns für die Zeiten der Berührung mit dem Mondrande angeführt.

Die Größen a und b ermöglichen die Vorausberechnung der genäherten Ein- oder Austrittszeiten für andere Orte innerhalb Deutschlands, die nicht allzuweit von den angeführten fünf Hauptpunkten entfernt sind. Bezeichnen  $\lambda$  und  $\varphi$  die geographischen Koordinaten des Beobachtungsortes,  $\lambda_0$  und  $\varphi_0$  diejenigen des ihm am nächsten gelegenen Hauptpunktes, so ist die gesuchte Berührungszeit gleich der für den Hauptpunkt geltenden +a  $(\lambda-\lambda_0)+b$   $(\varphi-\varphi_0)$ . Hierbei sind die Differenzen  $\lambda-\lambda_0$  und  $\varphi-\varphi_0$  in Einheiten des Grades unter Mitnahme der Zehntelgrade auszudrücken, damit sich die Korrektion in Zeitminuten ergibt.

Die Angaben über Sternbedeckungen sind von dem Nautical Almanac Office, London, zur Verfügung gestellt worden.

# Mondbewegung und Lage des Mondäquators gegen den Erdäquator (S. 291\*).

Auf S. 291\* finden sich:

Q, Aufsteigender Knoten der Mondbahn auf der Ekliptik,

 $L_{\mathbb{C}}$ , Mittlere Länge des Mondes,

 $\tilde{\omega}$ , Mittlere Länge des Perigäums

 $M_{\odot}$ , Mittlere Anomalie des Mondes,

i, Neigung des Mondäquators gegen den Erdäquator,

△, Stück des Mondäquators zwischen Ekliptik und Erdäquator,

 $\Omega'$ , Aufsteigender Knoten des Mondäquators auf dem Erdäquator,  $\mathbb{C}$ , der aufsteigende Knoten des Mondäquators auf der Ekliptik ist gleich dem absteigenden Knoten der Mondbahn, also

$$g = g \pm 180^{\circ}$$
.

Vom Jahrgang 1926 ab sind die Brownschen Mondtafeln verwendet.

Die Größen i,  $\Delta$  und  $\Omega'$  berechnen sich aus:

$$\sin \frac{\mathbf{I}}{2} (\Delta + \Omega') \cos \frac{\mathbf{I}}{2} i = \cos \frac{\mathbf{I}}{2} (\varepsilon - J) \sin \frac{\mathbf{I}}{2} \mathfrak{V}$$

$$\cos \frac{\mathbf{I}}{2} (\Delta + \Omega') \cos \frac{\mathbf{I}}{2} i = \cos \frac{\mathbf{I}}{2} (\varepsilon + J) \cos \frac{\mathbf{I}}{2} \mathfrak{V}$$

$$\sin \frac{\mathbf{I}}{2} (\Delta - \Omega') \sin \frac{\mathbf{I}}{2} i = \sin \frac{\mathbf{I}}{2} (\varepsilon - J) \sin \frac{\mathbf{I}}{2} \mathfrak{V}$$

$$\cos \frac{\mathbf{I}}{2} (\Delta - \Omega') \sin \frac{\mathbf{I}}{2} i = \sin \frac{\mathbf{I}}{2} (\varepsilon + J) \cos \frac{\mathbf{I}}{2} \mathfrak{V};$$

dabei ist J, die Neigung des Mondäquators gegen die Ekliptik, nach F. Hayn (Astr. Nachr. Bd. 199, S. 263) zu  $J=\mathfrak{1}^{\circ}$  32′ 20″ angenommen worden. Die Zahlen geben die Lage des mittleren Mondäquators (ohne physische Libration).

Die auf S. 291\* gemachten Angaben über die Elemente der Mondbahn und des Mondäquators werden, teilweise in Verbindung mit den Größen  $L_{\odot}$  und  $M_{\odot}$  auf S. 29, zu verschiedenen Zwecken verwendet:

- ı) Als Argumente für die Berechnung der Reduktionsgrößen  $A,\ B,\ C,\ D,\ E,\ A',\ B'.$
- 2) Bei Bestimmung der selenographischen Koordinaten von Punkten der Mondoberfläche (siehe darüber den folgenden Abschnitt).
  - 3) Bei Berechnung der optischen und physischen Libration des Mondes.
  - a) Für die Berechnung der optischen Libration des Mondes sind alle nötigen Angaben in den Erläuterungen zu den Hilfstafeln unter Nr. 8 (S. 364\*) gemacht.
  - b) Die Beträge der *physischen* Mondlibration in selenographischer Länge, der Neigung des Mondäquators und seinem aufsteigenden Knoten auf der Ekliptik  $\tau$ ,  $\rho$ ,  $\sigma$  haben die Werte:

$$\begin{split} \tau &= -\text{ i3''}\sin M_{\odot} + 65''\sin M_{\odot} + 26''\sin 2\left(L_{\odot} - M_{\odot} - \Omega\right) \\ \rho &= -\text{ i06''}\cos M_{\odot} + 34''\cos \left(2L_{\odot} - M_{\odot} - 2\Omega\right) - \text{ i1''}\cos 2\left(L_{\odot} - \Omega\right) \\ \sigma &\sin J = -\text{ i08''}\sin M_{\odot} + 34''\sin \left(2L_{\odot} - M_{\odot} - 2\Omega\right) - \text{ i1''}\sin 2\left(L_{\odot} - \Omega\right) \end{split}$$

Diese Zahlenangaben beruhen auf der Annahme f = 0.73, worüber F. Hayn (Astr. Nachr. Bd. 199, S. 264) einzusehen ist.

## Ephemeride für den Mondkrater Mösting A. (S. 292\*—296\*).

Die Ephemeride des Mondkraters Mösting A. dient zwei verschiedenen Zwecken: erstens zur genauen Bestimmung von Mondörtern am Himmel durch Beobachtung des Kraters, zweitens zur Bestimmung der selenographischen Koordinaten weiterer Punkte der Mondoberfläche durch deren mikrometrischen Anschluß an Mösting A.

Sie gilt für oh Welt-Zeit und enthält für die Tage, an welchen Mösting A. innerhalb der Beleuchtungsgrenze liegt, die Unterschiede  $\alpha_{\mathbb{C}} - \alpha_k$  in Rektaszension und  $\delta_{\mathbb{C}} - \delta_k$  in Deklination zwischen der Mondmitte und dem Krater, vom Erdmittelpunkt aus gesehen, sowie den Logarithmus des Sinus der Äquatorial-Horizontalparallaxe  $p_k$  des

Kraters, welche von der des Mondes  $p_{\mathbb{C}}$  zu unterscheiden ist, mit den zugehörigen Differenzen.

Zur Anwendung der Ephemeride auf Beobachtungen des Kraters interpoliere man  $\alpha_{\mathbb{C}} - \alpha_k$ ,  $\delta_{\mathbb{C}} - \delta_k$  und log sin  $p_k$  mit der Beobachtungszeit. Fügt man alsdann  $\alpha_{\mathbb{C}} - \alpha_k$  und  $\delta_{\mathbb{C}} - \delta_k$  zum geozentrischen Ort des Kraters hinzu (die Parallaxe wird mit  $p_k$  und  $\delta_k$ , der Deklination des Kraters, berechnet), so hat man die geozentrische Rektaszension und Deklination des Mondes für die Beobachtungszeit.

Hat man einen Punkt der Mondoberfläche mikrometrisch an Mösting A. angeschlossen, so bestimme man zunächst die topozentrischen, d. h. mit Parallaxe behafteten Koordinatendifferenzen  $\alpha'_{\mathbb{C}} - \alpha'_{k}$  und  $\delta'_{\mathbb{C}} - \delta'_{k}$  zwischen Mondmittelpunkt und Mösting A. aus folgenden Identitäten:

 $\alpha'_{\mathbb{C}} - \alpha'_{k} = \alpha_{\mathbb{C}} - \alpha_{k} + (\alpha'_{\mathbb{C}} - \alpha_{\mathbb{C}}) - (\alpha'_{k} - \alpha_{k})$  $\delta'_{\mathbb{C}} - \delta'_{k} = \delta_{\mathbb{C}} - \delta_{k} + (\delta'_{\mathbb{C}} - \delta_{\mathbb{C}}) - (\delta'_{k} - \delta_{k}).$ 

Verbindet man die so erhaltenen topozentrischen Abstände zwischen der Mondmitte und Mösting A. mit den mikrometrischen Messungen zwischen Mösting A. und einem zweiten Krater, so erhält man die topozentrische Lage des letzteren gegen die Mondmitte und kann hieraus mit Hilfe von  $\alpha'_{\mathbb{C}}$  und  $\delta'_{\mathbb{C}}$  und den Angaben auf S. 291\* die selenographische Länge und Breite des zweiten Kraters berechnen. Hierzu dienen die im folgenden angeführten Formeln.

Bezeichnet man mit  $\alpha'$  und  $\delta'$  die topozentrische AR. und Dekl. des an Mösting A. angeschlossenen Kraters, so hat man:

$$s \sin \pi_{m} = (\alpha' - \alpha'_{\mathbb{C}}) \cos \frac{1}{2} (\delta' + \delta'_{\mathbb{C}})$$

$$s \cos \pi_{m} = \delta' - \delta'_{\mathbb{C}}$$

$$\pi = \pi_{m} - \frac{1}{2} (\alpha' - \alpha'_{\mathbb{C}}) \sin \frac{1}{2} (\delta' + \delta'_{\mathbb{C}})$$

$$\sin (K + s) = \sin s \csc h'.$$

h' ist der Abstand des Kraters vom Mondschwerpunkt, gesehen vom Beobachtungsort aus, der aus h, dem vom Erdmittelpunkt aus gesehenen Abstand, durch Anbringen der Parallaxe gewonnen wird. Ist die Entfernung des Kraters vom Mondschwerpunkt gänzlich unbekannt, so möge für h der aus Sternbedeckungen folgende Wert des Mondhalbmessers 15' 32".59 (nach J. Peters, Astr. Nachr. Bd. 138, S. 147) eingesetzt werden.

Die so erhaltenen Werte von  $\lambda$  und  $\beta$  beziehen sich auf den mittleren (vom Einfluß der physischen Libration freien) Mondäquator; die Transformation auf den wahren erfolgt durch die Korrektionen:

$$\begin{split} d\lambda &= +\text{ i} 3'' \sin M_{\odot} - 65'' \sin M_{\odot} - 26'' \sin 2 \left( L_{\odot} - M_{\odot} - \Omega \right) \\ &+ \text{ tg } \beta \left[ -\text{ i} 106'' \cos \left( L_{\odot} - M_{\odot} - \Omega + \lambda \right) \right. \\ &+ 34'' \cos \left( L_{\odot} - M_{\odot} - \Omega - \lambda \right) - \text{ i} 1'' \cos \left( L_{\odot} - \Omega - \lambda \right) \right] \\ d\beta &= + \text{ i} 08'' \sin \left( L_{\odot} - M_{\odot} - \Omega + \lambda \right) + 34'' \sin \left( L_{\odot} - M_{\odot} - \Omega - \lambda \right) \\ &- \text{ i} 1'' \sin \left( L_{\odot} - \Omega - \lambda \right) \end{split}$$

Bringt man diese Korrektionen  $d\lambda$  und  $d\beta$  an  $\lambda$  und  $\beta$  an, so erhält man die selenographischen Koordinaten des Kraters:

$$\lambda_0 = \lambda + d\lambda, \qquad \beta_0 = \beta + d\beta$$

Der Berechnung der Ephemeride des Kraters Mösting A. liegen folgende von F. Hayn ermittelte Konstanten (Astr. Nachr. Bd. 199, S. 263) zugrunde:

$$\lambda_0 = -5^{\circ} \text{ 10' } 7'', \; \beta_0 = -3^{\circ} \text{ 11' } 2'' \\ h = 15' \; 33\rlap.4'$$

Für die Reduktion auf den mittleren Mondäquator wurden die Werte angenommen:

$$\begin{split} d\lambda &= -\text{I3''} \sin M_{\odot} + 65'' \sin M_{\odot} + 26'' \sin 2 \left( L_{\odot} - M_{\odot} - \Omega \right) \\ d\beta &= -\text{I07''} \sin \left( L_{\odot} - M_{\odot} - \Omega + \lambda_{0} \right) - 34'' \sin \left( L_{\odot} - M_{\odot} - \Omega - \lambda_{0} \right) \\ &+ \text{I1''} \sin \left( L_{\odot} - \Omega - \lambda_{0} \right), \end{split}$$

so daß die auf den mittleren Mondäquator bezogenen selenographischen Koordinaten des Kraters Mösting A. sind:

$$\lambda = \lambda_0 + d\lambda, \qquad \beta = \beta_0 + d\beta.$$

Die Formeln zur Berechnung der Ephemeride siehe in den Erläuterungen zum Jahrbuch 1916.

#### **Jupitertrabanten** (S. 297\*—298\*).

Die Seiten 297\* und 298\* enthalten die Zeitangaben (in Welt-Zeit) für die Verfinsterungen der vier hellen Jupitertrabanten in dem Schattenkegel des Jupiter; Ein- und Austritte sind durch beigefügtes E. und A. unterschieden.

Die Angaben für die scheinbare Größe des Saturn und für die Lage und Größe des Saturnsringes haben die folgende Bedeutung:

- α Große Achse des Saturn.
- β Kleine Achse des Saturn.
- $p_{\alpha}$  Phase; positiv, wenn der Ostrand, negativ, wenn der Westrand verdunkelt ist.
- a Große Achse der Ringellipse.
- b Kleine Achse der Ringellipse; positiv, wenn die nördliche, negativ, wenn die südliche Fläche des Ringes sichtbar ist.

- U' Heliozentrische Länge des Saturn, gezählt auf der Ringebene vom aufsteigenden Knoten des Ringes in der Ekliptik an.
- B' Erhöhungswinkel der Sonne über der Ringebene vom Saturn aus gesehen; nördlich positiv, südlich negativ.
- P' Winkel der kleinen Achse der Ringellipse mit dem durch den Saturnsmittelpunkt gehenden Längenkreise; östlich positiv, westlich negativ.
- U Geozentrische Länge des Saturn, gezählt auf der Ringebene vom aufsteigenden Knoten des Ringes im Erdäquator an.
- B Erhöhungswinkel der Erde über der Ringebene vom Saturn aus gesehen; nördlich positiv, südlich negativ.
- P Winkel der kleinen Achse der Ringellipse mit dem durch den Saturnsmittelpunkt gehenden Stundenkreise; östlich positiv, westlich negativ.
- N Aufsteigender Knoten der Ringebene im Erdäquator, gezählt vom Äquinoktium an.
- J Neigung der Ringebene gegen den Erdäquator.
- $\omega$  Entfernung der Ekliptik vom Erdäquator, gemessen auf der Ringebene.

Es liegen folgende Bestimmungen nach H. Struve zugrunde:

Durchmesser des Saturn in der Entfernung 9.53887 Äquatorial 17''.47 Polar 15''.65

Durchmesser des Ringes in der Entfernung 9.53887 2 R = 39''35

Lage des Saturnsringes gegen die Ekliptik und das Äquinoktium von 1889.25 nach G. Struve

 $\Omega_1 = 167^{\circ} 58.08$  und  $i_1 = 28^{\circ} 4.55$ 

#### Saturnstrabanten (S. 301\*—310\*).

Die Berechnungen der Saturnstrabanten Mimas bis Rhea sind mit den von G. Struve in den Veröffentlichungen der Universitätssternwarte Berlin-Babelsberg, Bd. VI, Heft 4 abgeleiteten Elementen durchgeführt worden. Für Titan und Japetus sind die von ihm in Bd. VI, Heft 5 angegebenen Elemente benutzt worden, und für Hyperion haben die von J. Woltjer in den Annalen der Sternwarte Leiden, Bd. 16, Teil 3 bestimmten Elemente als Grundlage gedient.

Die den Ephemeriden zugrunde liegenden Elemente sind:

MIMAS (Berlin-Bbg. VI, Heft 4)

Epoche: 1889 April o.o Mittl. Zt. Grw.

 $E_0 = 127^{\circ} 5.5$ 

 $n = 381^{\circ}.994442$ 

 $\delta l = -44^{\circ}390 \sin \left[ 5^{\circ}.0864 \left( \tau - 1866.27 \right) \right] \\ -0^{\circ}764 \sin 3 \left[ 5^{\circ}.0864 \left( \tau - 1866.27 \right) \right]$ 

- 0.764 sin 3 [5.0864 ( $\tau$  –

 $l_1 = E_0 + nt_d + \delta l$ 

 $\Theta = 56^{\circ}1 - 365^{\circ}23 t$ 

 $\gamma = 1^{\circ} 31'0$ 

 $\Pi_1 = 105^{\circ}0 + 365^{\circ}60 t$ 

e = 0.0201

a = 26''.826

ENCELADUS (Berlin-Bbg. VI, Heft 4)

Epoche: 1889 April o.o Mittl. Zt. Grw.

 $E_0 = 199^{\circ} 25.8$ 

n = 262.7319405

 $\delta l = + 14.39 \sin(63.75 + 32.51 t)$ 

 $+ 14.06 \sin (117.28 + 93.14 t)$ 

 $l_1 = E_0 + nt_d + \delta l$ 

 $\Theta = 51.81 - 152.7 t$ 

 $\gamma = 1.4$ 

 $\Pi_1 = 308^{\circ}38 + 123^{\circ}43 t$ 

e = 0.00444

a = 34.416

TETHYS (Berlin-Bbg. VI, Heft 4)

Epoche: 1889 April o.o Mittl. Zt. Grw.

 $E_0 = 284^{\circ} 28'.3$ 

n = 190.697950

 $\delta l = +2.065 \sin \left[ 5.0864 (\tau - 1866.27) \right] + 0.036 \sin 3 \left[ 5.0864 (\tau - 1866.27) \right]$ 

 $l_1 = E_0 + nt_d + \delta l$ 

 $\Theta = 110^{\circ}39 - 72^{\circ}25 t$ 

 $\gamma = 1^{\circ} 5.56$ 

e = 0.0000

a = 42''.605

DIONE (Berlin-Bbg. VI, Heft 4)

Epoche: 1889 April o.o Mittl. Zt. Grw.

 $E_0 = 253^{\circ} 52!0$ 

 $n = 131^{\circ}5349729$ 

 $\delta l = -0.93 \sin (63.75 + 32.51 t)$  $-0.91 \sin (117.28 + 93.14 t)$ 

 $l_1 = E_0 + nt_d + \delta l$ 

$$\Theta = 201^{\circ}0 - 31^{\circ}0 t$$
 $\gamma = 1^{\prime}.4$ 
 $\Pi_1 = 173^{\circ}.4 + 30^{\circ}.75 t$ 
 $e = 0.00221$ 
 $a = 54^{\prime}.567$ 

RHEA (Berlin-Bbg. VI, Heft 4) Epoche: 1889 April o.o Mittl. Zt. Grw.

$$\begin{split} E_0 &= 358^\circ\ 23\rlap.^27 \\ n &= 79\rlap.^\circ6900881 \\ l &= E_0 + nt_d \\ (\Omega - \Omega_1) \sin i_1 &= 20\rlap.^\prime49 \sin \left(344\rlap.^\circ09 - 10\rlap.^\circ20t\right) - 0\rlap.^\prime38 + 1\rlap.^\prime00 \sin \left(48\rlap.^\circ5 - 0\rlap.^\circ50t\right) \\ i - i_1 &= 20\rlap.^\prime49 \cos \left(344\rlap.^\circ09 - 10\rlap.^\circ20t\right) - 2\rlap.^\prime79 + 1\rlap.^\prime00 \cos \left(48\rlap.^\circ5 - 0\rlap.^\circ50t\right) \\ \Pi &= 275\rlap.^\circ85 + 0\rlap.^\circ53\ t + 17\rlap.^\circ64 \sin \left[9\rlap.^\circ5\ (\tau - 1879.59)\right] \\ e &= 0.00098 + 0.00030 \cos \left[9\rlap.^\circ5\ (\tau - 1879.59)\right] \\ a &= 76\rlap.^\prime203 \\ \Omega_1 \ \text{und} \ i_1 \ \text{bezeichnen die Lage des Saturnsringes.} \end{split}$$

TITAN (Berlin-Bbg. VI, Heft 5) Epoche: 1890 Jan. o.o Mittl. Zt. Grw.

$$E_0 = 260^{\circ} \ 24.26$$

$$n = 22^{\circ}577015$$

$$l = E_0 + nt_d + (E - E_0)$$

$$E - E_0 = + 4.39 \sin (40.69 - 0.506 t)$$

$$\Omega = 167^{\circ} \ 51.90 + 39.00 \sin (40.69 - 0.506 t)$$

$$i = 27^{\circ} \ 26.33 + 18.35 \cos (40.69 - 0.506 t)$$

$$\Pi = 276^{\circ} \ 7.7 + 31.41 t + 22.0 (\sin 2g - \sin 2g_0)$$

$$e = 0.02910 + 0.000186 (\cos 2g_0 - \cos 2g)$$

$$g = \Pi - \Omega - 4.55$$

$$g_0 = g \text{ für } t = 0$$

$$a = 176.578$$

HYPERION (J. Woltjer, Ann. Sternwarte Leiden Bd. XVI, 3, S. 64) Anfangsepoche für  $t_d$ : 1900 Januar 0.0 Mittl. Zt. Grw.

, , , 
$$t$$
: 1900.0  
Argumente:  $\sigma = 93^\circ:13 + 0^\circ:562039 t_d$   $\tilde{\omega} = 148^\circ:72 - 19^\circ:184 t$   
 $n = 16^\circ:9199896$   
 $l = 176^\circ:293 + 16^\circ:9199896 t_d + 9^\circ:92 \sin \sigma + 0^\circ:211 \sin (\tilde{\omega} + \sigma) + 0^\circ:192 \sin (\tilde{\omega} - \sigma) - 0^\circ:077 \sin \tilde{\omega}$   
 $\Pi = 70^\circ:05 - 18^\circ:6562 t - 13^\circ:67 \sin \tilde{\omega} + 0^\circ:93 \sin 2 \tilde{\omega} - 0^\circ:47 \sin \sigma$   
 $e = 0.10419 + 0.02414 \cos \tilde{\omega} - 0.00401 \cos \sigma - 0.00183 \cos 2 \tilde{\omega} + 0.00009 \cos (\tilde{\omega} - \sigma) - 0.00009 \cos (\tilde{\omega} + \sigma)$   
 $a = 214^\circ:32 - 0^\circ:74\cos \sigma$ 

 $\gamma$  = Neigung der Bahnebene gegen den Saturnsäquator, h = Länge des aufsteigenden Knotens auf dem Saturnsäquator, gezählt vom aufsteigenden Knoten des Saturnsäquators auf der Ekliptik.

JAPETUS (Berlin-Bbg. VI, Heft 5) Epoche: 1885 Sept. 1.0 Mittl. Zt. Grw.

 $E_0 = 75^{\circ} \ 25'.61$   $i = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 4^{\circ}.537995$   $\Pi = 354^{\circ} \ 27'.4 + 8'.1 \ t$   $l = E_0 + nt_d$  e = 0.02828  $\Omega = 142^{\circ} \ 11'.3 - 1'.375 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$   $n = 18^{\circ} \ 26'.39 - 0'.54 \ t$ 

 $l_1$ , l = Mittlere Länge in der Bahn

n = Tropische mittlere tägliche Bewegung

 $\delta l = \text{Libration}$ 

 $\tau = Epoche$ 

 $t_d = \text{Anzahl der Tage seit der Anfangsepoche}$ 

t =Anzahl der Jahre seit der Anfangsepoche

 $\Theta =$ Knoten auf dem Saturnsäquator

Ω = Knoten auf der Ekliptik

γ = Neigung der Trabantenbahn gegen den Saturnsäquator

i =Neigung der Trabantenbahn gegen die Ekliptik

 $\Pi_1$ ,  $\Pi = Perisaturnium$ 

e = Exzentrizität

a = Halbachse der Trabantenbahn in der mittleren Entfernung ( $\Delta$ ) = 9.53887

 $l_1$ ,  $\Pi_1$  und  $\Theta$  werden gezählt vom Äquinoktium aus in der Ekliptik, weiter im Saturnsäquator und dann erst in der Trabantenbahn, l und  $\Pi$  vom Äquinoktium aus in der Ekliptik und weiter in der Trabantenbahn.

Auf den Seiten 301\*-303\* sind die Hilfsmittel gegeben, um in bequemer Weise die Positionen der Trabanten ableiten zu können. Sieht man hierbei von den Neigungen  $\gamma$  ab, so erhält man die rechtwinkligen Koordinaten x und y des Trabanten in bezug auf ein Achsenkreuz, dessen Anfangspunkt im Mittelpunkt des Saturn gelegen ist, dessen X-Achse parallel der großen Achse des Ringes verläuft, positiv, wenn östlich, negativ, wenn westlich vom Saturn, und dessen positive Y-Achse mit dem durch den Saturnsmittelpunkt gehenden Stundenkreise den Winkel P einschließt, aus den Gleichungen:

$$\begin{split} x &= \frac{a \, (\varDelta)}{\varDelta} \, \frac{\mathbf{r}}{\mathbf{1} + \zeta} \, \frac{r}{a} \, \sin \, (u - U) \\ y &= \frac{a \, (\varDelta)}{\varDelta} \, \frac{\mathbf{1}}{\mathbf{1} + \zeta} \, \frac{r}{a} \, \sin \, B \, \cos \, (u - U). \end{split}$$

 $(\Delta)=9.53887$  bezeichnet den mittleren Wert der Entfernung Sonne—Saturn,  $\Delta$  ist die Entfernung Erde—Saturn, u=L+(v-M) ist die wahre Länge des Trabanten vom Erdäquator an gezählt.

$$\log \frac{I}{I+\zeta}$$
 ist auf Seite 303\* enthalten.

Ist genaueste Ortsbestimmung erforderlich, so darf man bei Mimas, Tethys und Rhea die Neigungen gegen den Saturnsäquator, da sie schon merklichere Werte annehmen, nicht mehr vernachlässigen; x und y ergeben sich dann aus:

$$\begin{split} x &= \frac{a \, (\varDelta)}{\varDelta} \, \frac{\mathbf{I}}{\mathbf{I} + \zeta} \, \frac{r}{a} \, \sin \, \left( u - U \right) \\ y &= \frac{a \, (\varDelta)}{\varDelta} \, \frac{\mathbf{I}}{\mathbf{I} + \zeta} \, \frac{r}{a} \, \sin B \left[ \cos \left( u - U \right) + \sin \gamma \, \cot g \, B \sin \left( u - \vartheta \right) \right]. \end{split}$$

Die Werte von  $\vartheta$ , der Länge des aufsteigenden Knotens der Trabantenbahn auf dem Saturnsäquator, gezählt vom Schnittpunkte des Saturnsäquators mit dem Erdäquator, finden sich für die fünf inneren Trabanten auf Seite 303\*; auch ist hier für Rhea  $\gamma$ , weil stärker mit der Zeit veränderlich, in Intervallen von 16 Tagen gegeben.

Will man aus x und y die Rektaszensions- und Deklinations- differenzen bestimmen, so dienen dazu die Gleichungen:

$$s\sin\left(p-P
ight)=x \ s\cos\left(p-P
ight)=y \ \Delta lpha=lpha_{lr}-lpha_{pl}=rac{ extbf{i}}{ extbf{i}5}s\sin p\sec\delta_{lr} \ \Delta \delta=\delta_{lr}-\delta_{pl}=s\cos p.$$

Auf den Seiten 304\*-306\* finden sich, außer den Hilfsgrößen U, B und P, für die Trabanten Titan, Hyperion und Japetus die genäherten Rektaszensions- und Deklinationsunterschiede gegen den Saturn in dem Sinne Trabant minus Planet für die beiden letzteren Trabanten.

Die aus den Angaben des Berliner Jahrbuchs ermittelten Trabantenörter sind auf das mittlere Äquinoktium der Epoche bezogen.

Zum Schluß enthalten die Seiten 307\*-310\* die Zeitangaben (in Welt-Zeit) für die östlichen Elongationen von Mimas, Enceladus, Tethys, Dione, Rhea, ferner für die östlichen und westlichen Elongationen ( $u-U=\pm 90^\circ$ ) und für die oberen und unteren Konjunktionen ( $u-U=0^\circ$ , 180°) von Titan, Hyperion und Japetus mit Saturn; diese Zeitangaben für die Elongationen und Konjunktionen sind bereits für Lichtzeit korrigiert, also ohne weiteres mit den Beobachtungen vergleichbar.

#### Konstellationen (S. 311\*-312\*).

In der Übersicht der Konstellationen des Jahres 1940 sind die hauptsächlichsten Planeten-Konstellationen gegeneinander und gegen Sonne und Mond, sowie die Angaben der Epochen, zu welchen sich die Planeten in gewissen Hauptpunkten ihrer Bahn und ihres synodischen Laufes befinden, zusammengestellt. Die Bedeutung der hier verwendeten Zeichen siehe Seite VIII des Vorworts. — Die Konjunktionen der Planeten mit dem Mond und ihre gegenseitigen sind als Konjunktionen in AR. zu verstehen. Die Angaben über Konjunktion und Opposition der Planeten mit der Sonne entsprechen den Zeiten, zu denen der Längenunterschied zwischen Planet und Sonne o° oder 180° ist.

#### Hilfstafeln (S. 313\*-336\*).

Es folgt eine Reihe von häufig gebrauchten Hilfstafeln.

- 1) Tafeln für Präzessionswerte (S. 313\*-315\*).
  - a) Präzession in Rektaszension und Deklination (Seite 313\*)

$$p_{\alpha} = m + \frac{1}{15}n \sin \alpha \operatorname{tg} \delta$$
  
 $p_{\delta} = n \cos \alpha$ 

b) Präzessionswerte  $m, n, \psi, \pi$ , II und  $\varepsilon$ , die mittlere Schiefe der Ekliptik (Seite 313\*).

Mit diesen Werten berechnet sich die Präzession für die Elemente einer Bahnebene im System der Ekliptik nach:

$$\begin{array}{ll} p_{\Omega} &= \psi - \pi \cot i \sin \left( \Pi - \Omega \right) \\ p_i &= -\pi \cos \left( \Pi - \Omega \right) \\ p_{\omega} &= \pi \csc i \sin \left( \Pi - \Omega \right) \end{array}$$

und im System des Äquators nach:

$$p_{\Omega'} = m - n \cot i' \cos \Omega'$$
  
 $p_{i'} = -n \sin \Omega'$   
 $p_{\omega'} = n \cos \Omega' \operatorname{cosec} i'$ 

c) Präzession in Länge und Breite (Seite 314\*-315\*).

$$p_{\lambda} = \psi + \pi \operatorname{tg} \beta \cos (\Pi - \lambda)$$
  
 $p_{\beta} = \pi \sin (\Pi - \lambda)$ 

Den Tafeln a) und c) liegen die Präzessionswerte für 1950.0 zugrunde. Über die Bedeutung der Bezeichnungen und die Zahlenwerte vergleiche die Erläuterungen zum Jahrbuch für 1916.

- 2) Hilfstafeln zur Verwandlung von Mittlerer Zeit in Sternzeit (S. 316\*, 318\*) und von Sternzeit in Mittlere Zeit (S. 317\*, 319\*).
- 3) Eine Tafel zur Verwandlung von Stunden, Minuten und Sekunden in Dezimalteile des Tages und umgekehrt (S. 320\*-321\*).
- 4) Eine Tafel für die Ermittelung eines Datums in der Julianischen Periode (Seite 322\*-326\*). Die Tafel besteht aus zwei Teilen. Der erste Teil (S. 322\*-323\*) gibt in vierjährigen Schaltperioden für die Jahre o bis 2000 die Anzahl der am o. Januar, 12<sup>h</sup> Welt-Zeit, seit Anfang der Julianischen Periode verflossenen Tage. Als Ergänzung gibt die Hilfstafel am Fuß der Seite die Anzahl der am o. jedes Monats, 12<sup>h</sup> Welt-Zeit, seit Beginn der Schaltperiode verflossenen Tage. Man gehe bis zum 4. Oktober des Jahres 1582 mit dem Datum des Julia

nischen, für spätere Jahre mit dem Datum des Gregorianischen Kalenders in die Tafel ein. Der zweite Teil (S. 324\*-326\*) gibt für die Jahre 1860-1979 unmittelbar die Anzahl der im Gregorianischen Kalender am o. eines jeden Monats, 12h Welt-Zeit, seit Beginn der Julianischen Periode verflossenen Tage.

- 5) Eine Tafel zur Verwandlung von Minuten und Sekunden in Dezimalteile des Grades und umgekehrt (S. 327\*).
- 6) Tafel des halben Tagbogens (S. 328\*-329\*), berechnet mit der Horizontalrefraktion 34'.9 für geographische Breiten von + 30° bis + 60° und Deklinationen von 30° bis + 30°.
- 7) Reduktionstafeln für die Auf- und Untergangszeiten der Sonne und des Mondes (S. 330\*-333\*). Sie geben die Reduktion der für + 50° Breite gültigen Zeiten, wie sie in den Ephemeriden enthalten sind, auf geographische Breiten zwischen + 30° und + 60° und sind für das Erscheinen oder Verschwinden des oberen Gestirnsrandes gerechnet.
- 8) Die Tafel zur Berechnung der optischen Mondlibration (S. 334\*-335\*) gibt mit dem Argument  $\lambda \Omega$  die Werte  $\Delta\lambda$ ,  $\alpha$  und B entsprechend den Gleichungen:

$$\Delta \lambda = \frac{1}{\operatorname{arc} I'} \operatorname{tang}^2 \frac{1}{2} J \sin 2 (\lambda - \Omega)$$

$$a = -\cos (\lambda - \Omega) \sin J$$

$$\tan B = -\sin (\lambda - \Omega) \tan J$$

J = Neigung des Mondäquators gegen die Ekliptik.

Ω = Länge des aufsteigenden Knotens der Mondbahn auf der Ekliptik (s. S. 291\*).

 $\lambda, \beta = \text{Länge}$  und Breite des Mondmittelpunktes, berechnet für den Beobachtungsort.

Bezeichnen noch  $L_{\mathbb{C}}$  die mittlere Länge des Mondes, l' und b' die optische Libration der Mondmitte in selenographischer Länge und Breite, so ist:

$$l' = \lambda - L_{\odot} + \Delta\lambda - a (B - \beta)$$
  
 $b' = B - \beta$ 

Der Winkel C, welchen der Mondmeridian des Mittelpunktes der scheinbaren Mondscheibe mit dem Stundenkreise bildet, ergibt sich aus der Gleichung:

$$\sin C = -\sin i \frac{\cos \left(L_{z} + l' + \Delta - \mho\right)}{\cos \delta_{z}} = -\sin i \frac{\cos \left(\alpha_{z} - \Omega'\right)}{\cos b'},$$

worin  $\alpha_{\mathbb{C}}$ ,  $\delta_{\mathbb{C}}$  Rektaszension und Deklination des Mondmittelpunktes gesehen vom Beobachtungsort aus, bezeichnen; die anderen vorkommenden Größen i,  $\Delta$ ,  $\otimes$  und  $\otimes$  haben schon auf S. 354\* ihre Erklärung gefunden.

9) Eine Tafel der Hilfsgrößen s und c (S. 336\*) zur Berechnung der geozentrischen Breite  $\varphi'$  und der geozentrischen Entfernung  $\rho$  eines

Erdortes, ausgedrückt in Einheiten der großen Halbachse des Erdellipsoids, aus der geographischen Breite  $\varphi$  nach den Formeln:

$$\varrho \sin \varphi' = s \sin \varphi$$
 $\varrho \cos \varphi' = c \cos \varphi$ 

Darin haben s und c die Bedeutung:

$$s = \frac{\mathbf{I} - e^2}{\sqrt{\mathbf{I} - e^2 \sin^2 \varphi}}, \quad c = \frac{\mathbf{I}}{\sqrt{\mathbf{I} - e^2 \sin^2 \varphi}}, \quad e = \sqrt{2 \, \mathbf{\Omega} - \mathbf{\Omega}^2}.$$

Gemäß den Beschlüssen der Pariser Ephemeridenkonferenz von 1911 ist dabei die Abplattung  $\mathfrak{a}=\frac{1}{297}$  angenommen.

#### Koordinaten der Sternwarten (S. 337\*-343\*).

Die Seiten 337\*-343\* enthalten die geographischen und geozentrischen Koordinaten der Sternwarten.

Die Seehöhen sind in allen Fällen angegeben, wo sie sich einigermaßen sicher ermitteln ließen.

Die geographischen Längen sind auf den Meridian von Greenwich bezogen und dem entsprechend ist die »Korrektion der Sternzeit« die Differenz: Orts-Sternzeit in mittlerer Mitternacht minus Greenwicher Sternzeit in mittlerer Mitternacht.

Die geozentrischen Koordinaten sind den Beschlüssen der Pariser Ephemeridenkonferenz vom Oktober 1911 gemäß unter Annahme der Abplattung 1:297 berechnet.

Bei Berechnung von log ρ ist die Seehöhe berücksichtigt.

#### Normalzeiten der wichtigeren Länder (S. 344\*).

Auf S. 344\* sind die in den wichtigeren Ländern eingeführten Normalzeiten in zwei Gruppen zusammengestellt, je nachdem sie an den Meridian von Greenwich angeschlossen sind oder einen eigenen Landes-Meridian zugrunde legen.

#### Berichtigungen

Jahrbuch 1939, S. 309\*. Japetus, Deklination: Die Differenz zwischen Dez. 3 u. 5 ist +11 anstatt +1.

S. 316\*. Aug. 17 8h lies  $\mathcal{P}$  anstatt  $\mathcal{P}$  im Perihel.

Jahrbuch 1940, S. 2\*-24\*. Zusatzkorrektionen für die Örter des FK 3 siehe S. 366\*. S. 8\*. Stern 279)  $\delta$  Geminorum. Die Eigenbewegung in Deklination ist -14 anstatt -41.

#### Zusatzkorrektionen

für die Örter des FK 3 für 1940.0

 $\Delta \alpha$  in o.ooi

Δδ in ο."οι

Nr.	Δα	Δδ	Nr.	Δα	Δδ	Nr.	Δα	Δδ	Nr.	Δα	Δδ
-			221						000		
<b>2</b> 8	+ I + 4	_	225	- I	_	440	+ 1	_	<b>660</b> 661	- I - I	
10	+ 4 + I	_	233	- I - 2		442	+ 1		675	+ 1	
11	+ 3	_	234	- 3	_	443 448	+ 3		678	- 6	
16	+ 1	_	237	_ I	_	451	+ 3	_	686	- I	_
21	I	_	247	- I		454	+ 3	decel	698	- 3	_
24 26	+ 3	_	248	-11	+1	455	+ 1		700	+ 1	_
	+ 1	_	259 260	— 2 — 6	_	459 <b>467</b>	+ 5	-	704 708	— I	_
29	+ I + I	_	264	+ 4	+1	468	+ I + I		715	- I	_
31											
32	+ r	_	265	- r	_	469	+ 2	_	721	— I	_
34	+ 1		280	— I	_	472	- - I	_	734		— r
41	+ 9	I	284	— 2	+1	474	+ I	_	748	— I	_
46	-+- I	_	300	— 2	+1	480	-+- I	_	754	— I	1
48	+ 1	_	310	— I	+1	481	+ 1		759	- 2	_
51	+ 3	-ı	317	_	+1	487	+ 2	-	764	— r	r
53	<b>—</b> 3	_	318	— I	_	493	+ 1	+1	770	— I	_
55	+ 1	-r	322	_	+r	503	+ 4	- <b>+</b> I	775	_	-r
63	_	—I	331	- 3		504	+ 1	_	787	+ 2	— <b>1</b>
70	+ 2	_r	338	_	+1	518	+ 1		795	- 3	-
72	+ 1	_	344	+ I	-+ <b>1</b>	524	- 3	_	805	+ I	— <b>1</b>
76	+ 1	—I	355	+ 1	+1	530	+ 1	+1	809	— т	_
87	+ 2	ı	357	+ 1	+r	542	+ 5	+2	810	+- 5	-r
90	<b>—</b> 5	_	362	— I	_	550	— I	_	817	— I	
92	_	-1	363	+ 1	_	560	-	+-1	820	+ 2	<b>r</b>
105	+ 4	-2	368	_	- <u>+</u> -1	565	— I	_	824		— <b>1</b>
108		—ı	372	+ 2	-+-I	567	_	$+\mathbf{r}$	839	+14	-2
113	— т	_	387	+ r	_	569	— т	_	841	+ 1	_
115	+ 2	-2	394	+ 1	_	574	-	+ <b>1</b>	846	+ 1	_
129	- 1	_	395	+ 5	_	589	_	- <del>-</del> 1	865	+ 2	_
138	r	—т	398	+ r	_	590	_ 2	+1	872	+ 1	_
145	— I	— <b>1</b>	400	+ I	_	600	— 1	_	874	+ I	_
146	- I	_	401	— 2	_	602	- I	_	876	+ 1	
166	_	—ı	403	+ 1	_	606	— I	_	877	+ 1	
173	<b>- 4</b>	т	411	- 3	_	610	- I	+ <b>1</b>	882	+ 1	_
178	— I	_	413	+ 7	_	611	- 5	+1	889	+ 1	_
182	— I	_	416	+ I	_	612	- I	_	893	+ 2	
183	- I		417	+ 1	_	625	- 2	_	895	+ 1	_
191	-10	—ı	429	+ r	_	632	— I	_	901	+ I	_
203	- I	_	433	+ 2	_	642	- 3	-	903	+- I	
			436	I		645	- I	_	904	-+- 3	
205 214	— 5 — 1	_	438	+ I	_	648	— I	_	90/4	5	
			430	1		040					

Die Sterne liegen über  $\pm$  60° Deklination mit Ausnahme der durch halbfetten Druck der Nummern kenntlich gemachten Sterne. Die Ephemeriden des Jahrbuches sind entsprechend zu verbessern.

## Zusatzsterne

des

# Dritten Fundamentalkatalogs

Mittlere Örter und Eigenbewegungen für 1940.0—1943.0



Bemerkung: Die Zeitminuten und Grade der Örter sind für die vier Jahre nur einmal gegeben, wobei die Zeitsekunden bzw. Bogenminuten nötigenfalls über 60° bzw. 60′ erhöht wurden. In den letzteren Fällen sind die Zeitminuten bzw. die Grade durch einen \* gekennzeichnet.

Die jährlichen Eigenbewegungen in den Spalten 7 und 12 gelten für 1940.0. Falls die Werte sich bis 1943.0 ändern, sind diese in den Fußnoten enthalten

		R	ektaszei	nsion		μ		Deklina	tion		μ'
Nr.	Name	1940	1941	1942	1943	in 0.0001	1940	1941	1942	1943	in o."001
1001 1002 1003 1004 1005	45 G. Tucn 33 Pisc 9 G. Ceti χ Pegs σ Andr	h m 8 o 1 39.878 o 2 15.818 o 3 45.963 o 11 29.617 o 15 11.127	8 42.931 18.888 49.034 32.720 14.260	45.982 21.959 52.105 35.824 17.393	49.033 25.030 55.175 38.929 20.526	+ 93 - 8 + 73 + 65 - 56	-71 46 15.10 - 6 2 35.11 -23 26 27.03 +19 52 23.34 +36 27 10.13	45 55.07 2 14.97 26 7.03 52 43.36 27 30.09	45 35.04 1 54.83 25 47.03 53 3.38 27 50.05	45 15.02 1 34.69 25 27.03 53 23.41 28 10.02	- 16 + 97 - 40 + 5 - 35
1006 1007 1008 1009	Pi oh 38 -18° 41 41 Pisc p Andr 44 Pisc	0 15 29.878 0 17 0.445 0 17 30.442 0 17*57.189 0 22 19.519	33.010 3.490 33.529 60.348 22.594	36.143 6.536 36.616 63.507 25.670	39.276 9.582 39.7°3 66.666 28.746	+ 47 + 50 - 4 + 49 - 9	+31 11 3.36 -18 1 59.73 + 7 51 25.87 +37 38 11.25 + 1 36 27.44	11 23.36 1 39.74 51 45.87 38 31.19 36 47.38	11 43.36 1 19.74 52 5.87 38 51.14 37 7.32	12 3.36 0 59.74 52 25.87 39 11.09 37 27.25	+ 4 + 9 + 15 - 34 - 10
1011 1012 1013 1014 1015	Pi oh 78 48 Pisc 77 G. Scul 58 G. Phoe µ Phoe	0 24*57.842 0 25 5.418 0 30 43.087 0 31 36.818 0 38 29.624	60.887 8.535 46.055 39.674 32.460	63.932 11.651 49.023 42.529 35.295	66.977 14.768 51.991 45.385 38.130	+ 30 + 11 - 21 + 241 - 26	-11 59 25.88 +16 6 48.43 -29 53 19.45 -52 42 15.76 -46 24 50.42	59 5.97 7 8.34 52 59.62 41 55.87 24 30.65	58 46.07 7 28.26 52 39.79 41 35.98 24 10.88	58 26.16 7 48.17 52 19.96 41 16.09 23 51.11	- 15 - 11 - 32 + 40 + 11
1016 1017 1018 1019 1020	Lac 181 70 G. Phoe 79 G. Ceti 96 G. Pisc 64 Pisc	0 39 43.391 0 42 7.071 0 45 2.954 0 45 13.979 0 45 49.263	46.293 9.908 5.923 17.126 52.415	49.195 12.746 8.892 20.272 55.567	52.096 15.583 11.861 23.419 58.720	- 18 - 79 + 17 + 505 - 2	-36 21 4.23 -42*60 11.23 -22 2 58.64 + 4 58 20.74 +16 37 1.40	20 44.48 59 51.62 2 39.00 58 39.26 37 20.85	20 24.73 59 32.02 2 19.35 58 57.77 37 40.29	20 4.98 59 12.41 1 59.70 59 16.28 37 59.74	+ 10 - 100 - 9 -1141 - 197
1021 1022 1023 1024 1025	v Andr 20 Ceti 68 Pisc 98 G. Ceti 101 G. Ceti	0 46 29.739 0 49*56.380 0 54 34.905 0 55 43.334 0 58 39.992	33.046 59.446 38.150 46.372 42.970	36.353 62.512 41.396 49.411 45.947	39.661 65.578 44.643 52.449 48.925	+ 15 + 3 + 2 + 3 + 55	+40 45 9.09 - 1 28 11.01 +28 40 5.71 - 6 12 18.59 -16 35 12.06	45 28.71 27 51.46 40 25.18 11 59.21 34 52.74	45 48.32 27 31.90 40 44.65 11 39.83 34 33.43	46 7.93 27 12.35 41 4.11 11 20.46 34 14.11	- 17 - 13 - 7 - 73 - 71
1026 1027 1028 1029 1030	σ Scul 80 G. Phoe 72 Pisc 106 G. Ceti μ Cass	0 59 34.572 0 59 29.802 1 1*55.057 1 3 13.402 1 4 15.738	37.437 32.340 58.224 16.309 19.726	40.302 34.878 61.390 19.216 23.715	43.167 37.415 64.557 22.122 27.704	+ 57 - 2 + 4 - 19 +3937 <sup>1</sup> )	-31 52 28.63 -57 19 30.19 +14 37 25.90 -24 18 46.07 +54 37 36.27	52 9.24 19 10,79 37 45.28 18 26.83 37 53.96	51 49.86 18 51.39 38 4.65 18 7.59 38 11.64	51 30.47 18 31.99 38 24.02 17 48.35 38 29.33	$ \begin{array}{r} + & 17 \\ + & 29 \\ + & 59 \\ - & 42 \\ - & 1572^{2} \end{array} $
1031 1032 1033 1034 1035	υ Phoe γ Pisc ζ Pisc pr 89 Pisc ξ Andr	1 5 3.554 1 8 13.387 1 10 35.587 1 14 42.063 1 18 47.791	6.296 16.611 38.721 45.158 51.321	9.038 19.835 41.855 48.252 54.852	11.779 23.059 44.990 51.346 58.383	+ 35 + 26 + 95 - 35 + 31	-41 48 26.83 +20 42 58.20 + 7 15 30.87 + 3 17 56.59 +45 12 54.07	48 7.59 43 17.36 15 49.92 18 15.56 13 12.95	47 48.34 43 36.51 16 8.97 18 34.53 13 31.82	47 29.10 43 55.67 16 28.02 18 53.49 13 50.70	+ 4 - 5 - 50 - 19 + 11
1036 1037 1038 1039 1040	109 G. Scul 138 G. Ceti 9 G. Hydi 94 Pisc w Andr	I 20 43.515 I 21 45.654 I 23 0.918 I 23 26.897 I 24 3.239	46.307 48.702 2.993 30.136 6.825	49.100 51.751 5.068 33.376 10.412	51.892 54.799 7.143 36.616 13.999	- 5 + 11 + 27 + 31 + 321	-31 15 27.86 -3 9 37.43 -64 40 51.88 +18 55 48.29 +45 5 51.53	9 18.67 40 33.15 56 6.96 6 10.14	14 50.31 8 59.92 40 14.42 56 25.63 6 28.75	14 31.54 8 41.17 39 55.69 56 44.3° 6 47.36	- 37 - 26 - 10 - 57 - 100
1041 1042 1043 1044 1045	47 Ceti 38 Cass 48 Ceti 8 Phoe v Andr	I 23*53.880 I 26 43.743 I 26 43.431 I 28 45.322 I 33 15.929	46.309 47.820 19.448	59.801 52.651 49.187 50.319 22.968	62.762 57.108 52.065 52.816 26.488	+ 263	-13 22 4.37 +69 57 24.33 -21 56 20.96 -49 23 2.16 +41 6 22.02	21 45.65 57 42.88 56 2.32 22 43.44 6 40.05	21 26.92 58 1.43 55 43.69 22 24.72 6 58.08	21 8,20 58 19.98 55 25.06 22 6.00 7 16.10	+ 12 - 70 + 9 + 162 - 378
1046 1047 1048 1049		1 33*54.820 1 38 34.876 1 39 26.119 1 39 41.373 1 44*55.348	38.343 28.826 44.407	61.181 41.809 31.533 47.441 61.855	64.361 45.276 34.240 50.475 65.108	— 62 — I	+11 50 7.32 +34 56 36.67 -32 37 43.69 - 3 59 30.22 +16 39 27.11	50 25.76 56 54.86 37 25.52 59 12.08 39 45.06	50 44.18 57 13.04 37 7.35 58 53.93 40 3.01	51 2.61 57 31.22 36 49.18 58 35.79 40 20.95	- 32

<sup>1)</sup>  $\mu$  ab 1942.0: +0.3938 2)  $\mu$  für 1943.0: -1.7573

		Re	ktaszer	nsion		μ		Deklinat	tion		μ'
Nr.	Name	1940	1941	1942	1943	in 0:0001	1940	1941	1942	1943	in o."001
1051 1052 1053 1054	χ Ceti 2 Pers φ Phoe 4 Pers ν Forn	h m s 1 46 38.183 1 48 19.510 1 51*52.664 1 58 17.376 2 1 48.055	8 41.129 23.322 55.153 21.367 50.744	8 44.076 27.135 57.642 25.359 53.433	8 47.022 30.949 60.131 29.352 56.122	- 103 + 12 - 38 + 37 + 4	-10 58 56.94 +50 29 49.78 -42 47 26.38 +54 11 54.82 -29 35 2.57	58 39.12 30 7.60 47 8.70 12 12.26 34 45.28	58 21.30 30 25.42 46 51.01 12 29.69 34 28.00	58 3.48 30 43.24 46 33.34 12 47.11 34 10.72	- 90 - 23 - 18 + 3 + 9
1055 1056 1057 1058 1059 1060	15 Aris 19 Aris 51 Ceti 21 Aris 135 G. Phoe	2 7 17.704 2 9 46.644 2 9 48.946 2 12 18.131 2 12 6.220	21.029 49.916 52.126 21.534 8.648	24.354 53.188 55.305 24.937 11.075	27.679 56.460 58.485 28.341 13.502	+ 62 + 66 - 16 - 66 - 27	+19 13 5.67 +14*59 58.46 + 8 33 58.41 +24 45 57.67 -41 26 43.95	13 22.68 60 15.36 34 15.32 46 14.39 26 27.18	13 39.68 60 32.25 34 32.23 46 31.10 26 10.40	13 56.68 60 49.14 34 49.13 46 47.81 25 53.63	- 23 - 17 - 2 - 78 - 26
1061 1062 1063 1064 1065	232 G. Ceti 21 G. Forn 62 Andr 239 G. Ceti 8 Hydi	2 14*54.212 2 14 47.303 2 15 23.753 2 19 15.297 2 20 40.522	57.328 49.846 27.622 18.125 41.589	60.445 52.389 31.491 20.952 42.657	63.562 54.933 35.360 23.779 43.724	+ 242 <sup>1</sup> ) + 139 - 57 + 12 - 80	+ 1 28 30.32 -36 15 38.06 +47 6 15.55 -17 56 3.59 -68 55 55.51	28 47.37 15 21.32 6 32.19 55 47.18 55 39.11	29 4.42 15 4.59 6 48.83 55 30.78 55 22.71	29 21.47 14 47.86 7 5.46 55 14.38 55 6.32	+ 381 + 60 - 2 - 51 + 13
1066 1067 1068 1069	ρ Ceti κ Hydi 12 Tria 27 Aris 14 Tria	2 23 2.971 2 22 29.786 2 24 38.466 2 27 34.388 2 28 25.918	5.869 30.141 41.982 37.716 29.579	8.767 30.497 45.499 41.043 33.239	11.665 30.854 49.015 44.371 36.900	- 12 - 188 <sup>2</sup> ) - 15 + 22 + 37	-12 33 36.62 -73 55 2.91 +29 24 9.38 +17 26 22.28 +35 52 56.41	33 20.36 54 46.60 24 25.48 26 38.22 53 12.42	33 4.11 54 30.30 24 41.57 26 54.17 53 28.41	32 47.85 54 14.00 24 57.66 27 10.11 53 44.41	- 3 + 11 - 83 - 81 + 19
1071 1072 1073 1074 1075	σ Ceti ν Ceti 268 G. Ceti 80 Ceti ι Erid	2 29 14.514 2 32 43.303 2 32 47.203 2 33 2.698 2 38 17.936	17.357 46.452 50.492 5.651 20.304	20.200 49.600 53.782 8.604 22.671	23.043 52.748 57.072 11.557 25.039	- 52 - 21 +1209 - 25 + 115	-15 30 25.61 + 5 19 56.73 + 6 36 5.86 - 8 5 29.80 -40 6 40.87	30 9.78 20 12.47 36 23.08 5 14.12 6 25.45	29 53.96 20 28.20 36 40.29 4 58.44 6 10.03	29 38.14 20 43.92 36 57.50 4 42.76 5 54.61	- 118 - 21 +1464 <sup>3</sup> ) - 55 - 25
1076 1077 1078 1079 1080	ζ Horo 14 Pers 43 G. Forn σ Aris 40 G. Erid	2 38 47.569 2 40 10.041 2 41 34.532 2 48 10.523 2 53 36.805	49.437 13.945 37.199 13.836 39.812	51.305 17.851 39.867 17.148 42.819	53.173 21.757 42.535 20.461 45.827	+ 48 + 3 + 123 + 22 - 23	-54 48 22.14 +44 2 35.75 -25 44 57.50 +14 50 9.54 - 3 57 10.17	48 6.71 2 51.09 44 42.17 50 24.40 56 55.65	47 51.28 3 6.42 44 26.85 50 39.26 56 41.13	47 35.86 3 21.75 44 11.53 50 54.11 56 26.62	+ 10 - 6 + 61 - 23 - 41
1081 1082 1083 1084 1085	47 Aris 24 Pers λ Ceti -18° 516 τ <sup>3</sup> Erid	2 54 38.824 2 55 20.107 2 56 29.706 2 59 17.052 2 59 44.726	42.257 23.823 32.921 19.810 47.372	45.690 27.539 36.136 22.567 50.017	49.124 31.255 39.351 25.324 52.662	+ 165 - 42 + 1 - 17 - 105	+20 25 45.44 +34 56 38.34 + 8 40 9.85 -18 26 33.56 -23 51 31.22	25 59.91 56 52.80 40 24.23 26 19.37 51 17.08	26 14.37 57 7.26 40 38.60 26 5.17 51 2.94	26 28 84 57 21.72 40 52.97 25 50.99 50 48.81	- 28 + 10 - 10 - 22 - 47
1086 1087 1088 1089	58 G. Erid 63 G. Erid 55 Aris ζ Aris 79 G. Forn	3 0 52.717 3 4 28.517 3 5*59.741 3 11 26.834 3 12 18.445	54.768 31.351 63.349 30.282 20.804	56.818 34.185 66.958 33.73° 23.163	58.868 37.019 70.567 37.178 25.522	+ 18 + 6 + 15 - 19 + 24	-47 12 33.62 -13 59 14.99 +28 50 57.42 +20 49 24.27 -35 46 47.84	12 19.48 59 1.35 51 11.20 49 37.64 46 34.44	12 5.36 58 47.72 51 24.98 49 51.01 46 21.04	58 34.08 51 38.76 50 4.38 46 7.64	+ 14 - 253 - 10 - 72 + 12
1091 1092 1093 1094 1095	ζ Erid Lac 1044 × Ceti τ Aris ι Hydi	3 12*55.001 3 14 27.504 3 16 12.656 3 17 45.461 3 17 24.791	57.915 29.962 15.803 48.924 23.284	60.829 32.421 18.950 52.388 21.779		- 4 + 14 + 178 + 19 + 337	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 15.87 34 2.92 9 18.34 56 8.54 36 15.63	2 2.47 33 49.70 9 31.56 56 21.55 36 2.50	1 49.07 33 36.47 9 44.79 56 34.54 35 49.38	- 19
1096 1097 1098 1099	Pi 3h 27 17 Erid +34° 674 τ <sup>5</sup> Erid 20 Erid	3 19 26.476 3 27 38.265 3 28*50.332 3 31 8.154 3 33 33.263	31.678 41.242 54.151 10.804 35.996	36.881 44.218 57.971 13.453 38.729	42.085 47.195 61.790 16.103 41.462	- 13 + 8 - 7 + 30 + 17	+64 22 25.06 - 5 16 46.63 +35 15 33.28 -21 49 58.88 -17 39 52.42	22 37.99 16 34.25 15 45.57 49 46.79 39 40.47	22 50.90 16 21.88 15 57.85 49 34.70 39 28.53	23 3.81 16 9.51 16 10.12 49 22.61 39 16.59	+ 13 + 4 - 25

<sup>1)</sup> μ für 1943.0: +0.0243 2) μ ab 1941.0: -0.0187 2) μ ab 1942.0: +1.463

3		R	ektaszei	nsion		μ		Deklinat	ion		μ,
Nr.	Name	. 1940	1941	1942	1943	in ofocor	1940	1941	1942	1943	in 0."001
1101 1102 1103 1104	10 Taur τ Forn 11 Taur 29 Taur +57° 752	h m s 3 33 48.480 3 36 17.807 3 37 10.947 3 42 28.950 3 48*50.072	8 51.542 20.303 14.530 32.138 54.940	54.603 22.799 18.113 35.326 59.808	8 57.665 25.294 21.697 38.514 64.677	$ \begin{array}{c cccc} - & 155 \\ + & 13 \\ + & 8 \\ + & 12 \\ + & 107^{1} \end{array} $	+ 0 12 45.16 -28 8 17.02 +25 8 13.07 + 5 51 48.68 +57 47 55.63	12 56.61 8 5.23 8 24.75 51 59.99 48 6.39	13 8.06 7 53.45 8 36.44 52 11.30 48 17.13	13 19.51 7 41.67 8 48.11 52 22.60 48 27.88	- 481 + 27 - 10 - 5 - 98
1106	Pi 3h 187	3 49 43.9°5	47.336	50.766	54.197	+ 100	+17 8 59.45	9 10.21	9 20.97	9 31.72	- 27
1107	145 G. Erid	3 5° 11.875	14.813	17.751	20.689	- 5	- 6 48 40.09	48 29.34	48 18.59	48 7.84	+ 1
1108	55 G. Horo	3 51 41.681	43.540	45.399	47.258	+ 29	-47 4 9.35	3 58.74	3 48.13	3 37.52	- 30
1109	17 G. Reti	3 57 25.413	26.701	27.989	29.277	+ 33	-57 16 19.14	16 8.91	15 58.68	15 48.45	+ 16
1110	8 Reti	3 57 47.444	48.393	49.341	50.290	+ 8	-61 34 9.16	33 58.99	33 48.81	33 38.64	- 13
1111	35 Erid	3 58 29.439	32.479	35.520	38.560	+ 14	- 1 42 59.13	42 49.01	42 38.89	42 28.78	- 12
1112	37 Taur	4 1 8.595	12.142	15.689	19.236	+ 66	+21 55 10.49	55 20.37	55 30.24	55 40.11	- 54
1113	λ Pers	4 2 6.220	10.688	15.156	19.625	- 10	+50 11 25.28	11 35.10	11 44.92	11 54.73	- 36
1114	63 G. Hydi	4 1 4.014	3.658	3.303	2.949	+ 56 <sup>2</sup> )	-71 19 59.98	19 50.00	19 40.01	19 30.03	+ 41
1115	43 Taur	4 5 39.975	43.470	46.965	50.461	+ 76	+19 27 7.78	27 17.34	27 26.89	27 36.44	- 29
1116	44 Taur	4 7 10.312	13.965	17.619	21.273	- 22	+26 19 33.59	19 43.02	19 52.45	20 1.88	- 36
1117	μ Pers	4 10 28.955	33.359	37.763	42.167	+ 8	+48 15 31.86	15 41.06	15 50.25	15 59.43	- 18
1118	μ Taur	4 12 16.377	19.635	22.893	26.151	+ 15	+ 8 44 36.81	44 45.86	44 54.92	45 3.96	- 19
1119	208 G. Erid	4 17 25.999	28.715	31.431	34.147	+ 16	-16 34 47.47	34 38.80	34 30.14	34 21.48	- 4
1120	ξ Erid	4 20 41.432	44.419	47.406	50.394	- 36	- 3 52 58.27	52 49.91	52 41.55	52 33.20	- 55
1121	43 Erid	4 21 46.856	49.110	51.363	53.616	+ 46	-34 9 18.26	9 9.88	9 1.50	8 53.12	+ 54
1122	+69° 258	4 23 32.318	38.612	44.907	51.203	+ 17 <sup>3</sup> )	+69 14 48.08	14 56.23	15 4.38	15 12.52	- 3°
1123	Br 615	4 25 25.864	28.964	32.065	35.166	+ 9	+ 1 14 57.12	15 5.13	15 13.14	15 21.15	- 2°
1124	57 Pers	4 29 11.177	15.398	19.619	23.840	+ 6	+42 56 15.81	56 23.54	56 31.27	56 39.00	+ 4
1125	ρ Taur	4 30 26.387	29.791	33.196	36.601	+ 68	+14 43 11.58	43 19.19	43 26.79	43 34.39	- 23
1126	Pi 4 <sup>h</sup> 148	4 37 34.159	37.914	41.669	45.425	+ 28	+28 30 1.65	30 8.67	30 15.69	30 22.70	- 32
1127	258 G. Erid	4 37 37.001	39.496	41.992	44.488	- 45	-24 35 54-75	35 47.69	35 40.62	35 33.57	+ 18
1128	Grb 866	4 38*47.472	52.031	56.591	61.151	- 2	+49 51 40.54	51 47.47	51 54.40	52 1.32	- 19
1129	α Cael	4 38 37.580	39.513	41.445	43.377	- 138	-41 58 38.62	58 31.73	58 24.84	58 17.96	- 78 <sup>4</sup> )
1130	β Cael	4 39*56.042	58.163	60.284	62.405	+ 30	-37 15 37.67	15 30.62	15 23.56	15 16.51	+ 199
1131 1132 1133 1134 1135	56 Erid 268 G. Erid Br 658 π <sup>3</sup> Orio 97 Taur	4 41 12.201 4 44 1.931 4 45 *51.997 4 46 34.826 4 47 *51.650	15.083 4.327 56.035 38.083 55.159	17.965 6.723 60.074 41.340 58.669	20.848 9.119 64.112 44.597 62.179	- 3 + 1 - 30 + 312 + 57	- 8 36 51.24 -28 11 41.45 +37 23 3.34 + 6 51 29.26 +18 44 21.91	36 44.48 11 34.91 23 9.75 51 35.59 44 28.07	36 37.73 11 28.38 23 16.15 51 41.91 44 34.24	36 30.99 11 21.85 23 22.55 51 48.23 44 40.40	+ 16 + 39 + 19 - 34
1136	o¹ Orio	4 49 8.107	11.501	14.895	18.289	- 3	+14 9 8.08	9 14.12	9 20.15	9 26.18	- 56
1137	ζ Auri	4 58 16.744	20.937	25.131	29.324	+ 10	+40 59 25.00	59 30.31	59 35.61	59 40.90	- 22
1138	η Mens	4 56 53.774	52.046	50.318	48.591	+ 71	-75 1 47.89	1 42.38	1 36.87	1 31.35	+ 59
1139	26 G. Cael	5 0 6.469	8.740	11.010	13.280	- 8	-31 51 26.98	51 21.72	51 16.47	51 11.21	+ 83
1140	11 Orio	5 1 8.262	11.690	15.119	18.547	+ 11	+15 19 19.81	19 24.86	19 29.91	19 34.96	- 34
1141	+27° 732 pr	5 5*58.851	62.618	66.386	70.153	+ 44	+27 57 21.74	57 26.36	57 30.96	57 35.56	- 66
1142	16 Orio	5 6 1.436	4.736	8.037	11.338	+ 41	+ 9 45 14.75	45 19.42	45 24.09	45 28.75	- 3
1143	13 G. Pict	5 5 39.140	40.921	42.703	44.484	+ 25	-44 53 56.67	53 51.94	53 47.21	53 42.48	+ 25
1144	μ Leps	5 10 14.077	16.772	19.467	22.162	+ 28	-16 16 30.78	16 26.49	16 22.21	16 17.93	- 28
1145	λ Auri	5 14 <sup>18</sup> 55.007	59.228	63.448	67.669	+ 458	+40 2 52.17	2 55.43	2 58.67	3 1.91	- 662
1146	λ Leps	5 16 48.562	51.326	54.090	56.855	- 2	-13 14 14.49	14 10.74	14 7.00	14 3.25	- 2
1147	22 Orio	5 18 41.844	44.907	47.970	51.033	- 2	- 0 26 24.74	26 21.15	26 17.56	26 13.98	- 1
1148	115 Taur	5 23 39.934	43.434	46.934	50.434	+ 4	+17 54 44.31	54 47.45	54 50.58	54 53.71	- 24
1149	18 G. Colm	5 25 9.632	11.556	13.481	15.405	- 8	-40 59 39.96	59 36.83	59 33.71	59 30.59	+ 95
1150	18 Caml	5 27 25.160	30.299	35.438	40.577	+ 146	+57 10 52.62	10 55.24	10 57.85	11 0.46	- 218

<sup>4)</sup> µ für 1943.0: —0."077

### Zusatzsterne des FK3 für 1940.0—1943.0

50		Re	ektaszei	nsion		μ		Deklinat	ion		μ΄
Nr.	Name	1940	1941	1942	1943	in 0.50001	1940	1941	1942	1943	in 0.″001
1151 1152 1153 1154 1155	y Auri 20 G. Pict 35 G. Colm 8 Dora 142 G. Orio	h m 8 5 28 49.191 5 28 30.377 5 35 43.530 5 44 39.830 5 45 35.952	53.096 32.026 45.919 39.937 38.933	8 57.002 33.676 48.309 40.045 41.914	60.907 35.325 50.699 40.152 44.894	+ 14 + 8 - 51 + 37	+32 8 58.60 -47 7 11.76 -27 14 39.89 -65 45 28.66 -4 6 34.15	9 1.31 7 9.15 14 37.78 45 27.31 6 33.09	9 4.02 7 6.53 14 35.67 45 25.96 6 32.04	9 6.72 7 3.92 14 33.57 45 24.62 6 31.00	- 3 -127 - 9 + 7 -202
1156 1157 1158 1159 1160	γ Pict ξ Auri 136 Taur 37 G. Pict γ Colm	5 48 44.095 5 49*48.914 5 49 33.274 5 49 31.701 5 55 24.498	45.184 53.942 37.045 33.059 26.625	46.273 58.970 40.817 34.417 28.753	47.363 63.998 44.588 35.774 30.880	+ 84 - 17 + 4 + 5 - 2	-56 10 51.42 +55 41 43.77 +27 35 59.73 -52 7 19.03 -35 17 19.03	10 50.50 41 44.68 36 0.63 7 18.20 17 18.62	10 49.58 41 45.58 36 1.52 7 17.37 17 18.21	10 48.66 41 46.47 36 2.41 7 16.53 17 17.81	$ \begin{array}{r} -62^{1}) \\ +20 \\ -14 \\ -79 \\ +9 \end{array} $
1161 1162 1163 1164 1165	60 Orio +33° 1209 1 Gemi 74 G. Colm 94 G. Leps	5 55 44.383 5 56 17.630 6 0 28.306 6 3 46.843 6 6 26.477	47.468 21.575 31.954 49.153 29.000	50.553 25.519 35.601 51.463 31.523	53.637 29.463 39.248 53.773 34.046	- 10 - 9 - 4 + 6 + 9	+ 0 32 56.18 +33 8 4.06 +23 16 6.08 -29 45 2.71 -22 24 55.60	32 56.55 8 4.39 16 5.93 45 3.08 24 56.20	32 56.92 8 4.71 16 5.78 45 3.46 24 56.81	32 57.28 8 5.03 16 5.62 45 3.84 24 57.42	+ I + 6 -104 - 40 36
1166 1167 1168 1169 1170	v Dora Br 904 sq x Auri 74 Orio 7 Mono	6 9 7.402 6 11 36.379 6 11 33.248 6 13 4.402 6 16 49.311	7.018 40.422 37.072 7.772 52.201	6.634 44.465 40.895 11.141 55.092	6.250 48.509 44.718 14.510 57.982	- 96 <sup>2</sup> ) - 53 - 55 + 54 - 4	-68 49 50.39 +36 10 6.65 +29 31 19.31 +12 17 25.91 - 7 47 46.78	49 51.16 10 5.64 31 18.03 17 24.95 47 48.25	49 51.94 10 4.63 31 16.74 17 23.98 47 49.72	49 52.71 10 3.61 31 15.45 17 23.02 47 51.20	+ 22 + 8 -265 +186 + 1
1171 1172 1173 1174 1175	23 G. CMaj Grb 1156 v Gemi 13 Mono 56 G. Mono	6 21 22.336 6 22 5.431 6 25 24.003 6 29 39.520 6 30 35.093	25.135 9.702 27.566 42.764 38.138	27.934 13.972 31.128 46.009 41.183	30.733 18.243 34.691 49.253 44.228	- 35 - 4 - 2 - 9	-11 29 47.28 +41 59 41.22 +20 15 6.58 + 7 22 42.54 - 1 10 23.65	29 49.18 59 39.28 15 4.34 22 39.95 10 26.34	29 51.10 59 37.33 15 2.10 22 37.35 10 29.04	29 53.01 59 35.37 14 59.85 22 34.74 10 31.74	- 40 - 11 - 18 - 7 - 24
1176 1177 1178 1179 1180	ψ <sup>6</sup> Auri 16 Mono 31 G. Pupp 80 G. Mono × CMaj	6 43 5.236 6 43 16.044 6 45 18.078 6 46 15.031 6 47 35.901	9.811 19.316 20.130 18.052 38.142	14.386 22.588 22.183 21.074 40.383	18.960 25.860 24.236 24.096 42.625	- 4 - 7 - 19 - 11 - 10	+48 51 18.41 + 8 39 8.13 -37 51 44.79 - 2 12 10.00 -32 26 16.99	51 14.66 39 4.35 51 48.74 12 14.02 26 21.12	51 10.91 39 0.58 51 52.70 12 18.04 26 25.25	51 7.15 38 56.80 51 56.65 12 22.06 26 29.39	+ 5 - 8 - 16 + 4 + 4
1181 1182 1183 1184 1185	or G. Mono ω Gemi σ CMaj C Pupp 2 G. CMin	6 57 30.698 6 58 45.466 6 59 19.680 7 2 8.562 7 4 34.832	33.580 49.122 22.071 10.464 38.075	36.463 52.778 24.461 12.365 41.318	39·345 56.434 26.851 14.267 44.562	$ \begin{array}{cccc} - & 15 \\ - & 7 \\ - & 4 \\ - & 21^{3}) \\ - & 3 \end{array} $	- 8 19 19.03 +24 18 9.73 -27 50 51.95 -42 14 51.74 + 7 34 0.96	19 24.02 18 4.64 50 57.08 14 57.04 33 55.35	19 29.01 17 59.55 51 2.21 15 2.34 33 49.73	19 34.00 17 54.45 51 7.35 15 7.65 33 44.11	- 10 - 3 + 1 + 67 - 36
1186 1187 1188 1189	20 Mono 22 δ Mono 51 Gemi γ² Voln Grb 1281	7 7 14.832 7 8 47.980 7 9*55.563 7 9 15.846 7 11 23.068	17.813 51.044 59.008 15.340 27.525	20.793 54.108 62.453 14.835 31.982	23.773 57.172 65.899 14.328 36.439	- I - 3 + 6 + 44 + 36	- 4 8 31.28 - 0 23 30.94 +16 15 44.61 -70 24 6.25 +47 20 54.75	8 36.87 23 36.87 15 38.55 24 12.12 20 48.42	8 42.45 23 42.79 15 32.47 24 17.98 20 42.09	8 48.05 23 48.72 15 26.40 24 23.85 20 35.75	+215 + 6 - 43 + 98 -184
1191 1192 1193 1194 1195	66 Auri 169 G. CMaj 6 CMin σ Pupp +46° 1286	7 26 27.422 7 27 19.556 7 32 10.572	63.520 25.681 30.762 21.460 14.929	67.676 28.437 34.101 23.363 19.286	71.831 31.193 37.441 25.267 23.643	- 5 -142 - 1 - 58 - 29	+40 47 23.21 -13 37 57.37 +12 7 56.05 -43 10 44.40 +46 18 52.08	47 16.32 38 4.43 7 48.65 10 51.66 18 44.20	47 9.43 38 11.50 7 41.24 10 58.93 18 36.30	47 2.54 38 18.57 7 33.83 11 6.20 18 28.40	+190
1196 1197 1198 1199 1200	υ Gemi 125 G. Pupp Q Cari +37° 1769 81 Gemi	7 32 13.629 7 34 2.758 7 34 10.634 7 42 39.242 7 42 39.088	17.326 5.395 12.118 43.246 42.562	21.024 8.032 13.602 47.250 46.037	24.721 10.670 15.086 51.254 49.511	- 26 - 4 + 15 + 15 - 54	+27 I 50.79 -19 34 2.64 -52 23 57.27 +37 39 51.83 +18 39 28.59	1 42.83 34 10.63 24 5.30 39 43.16 39 19.85	1 34.86 34 18.63 24 13.33 39 34.48 39 11.10	1 26.89 34 26.63 24 21.36 39 25.79 39 2.35	+ 3 - 21 + 7

<sup>1)</sup>  $\mu$  ab 1941.0: -0.063 2  $\mu$  ab 1941.0: -0.0095 3)  $\mu$  ab 1942.0: -0.0020 4)  $\mu$  für 1943.0: -0.001

### Zusatzsterne des FK3 für 1940.0-1943.0

		R	ektasze	nsion		μ		Deklina	tion		μ'
Nr.	Name	1940	1941	1942	1943	in osoooi	1940	1941	1942	1943	in 0."001
1201	11 CMin	h m s 7 42*58.068	61.371	64.673	67.976	- 22	- TO 54 50 25	54 48.62	54 39.89	54 OF T5	- 24
1202	4 Pupp	7 43 11.044	13.806	16.569	19.332	— 10	+10 54 57-35 -14 25 0.24	25 8.96	25 17.68	54 31.15 25 26.41	+ 4
1203	187 G. Pupp	7 45 42.656	44.469	46.281	48.094	- 13	-46 27 31.39	27 40.31	27 49.23	27 58.15	+ 4
1204	ξ Pupp	7 46 46.188	48.711	51.235	53.758	- 3	-24 42 29.03	42 38.04	42 47.05	42 56.06	- 3
1205	ζCMin	7 48 35.278	38.389	41.501	44.612	- 15	+ 1 55 16.92	55 7.77	54 58.61	54 49.45	- 5
1206	61 G. Cari	7 48 13.437	14.428	15.419	16.410	<b>- 95</b>	-60 8 0.78	8 9.75	8 18.72	8 27.69	+151
1207	φ Gemi	7 49*49.634	53.307	56.979	60.651	- 28	+26 55 21.64	55 12.36	55 3.07	54 53.79	<b>— 35</b>
1208	i Cncr	7 53 35.109	38.516	41.922	45.329	- 23	+15 57 7.18	56 57.60	56 48.01	56 38.43	- 45
1209	Grb 1384	7 54 4.048	8.264	12.480	16.695	+ 38	+44 8 22.18	8 12.62	8 3.05	7 53.48	+ 8
1210	225 G. Pupp	7 55 16.535	18.927	21.318	23.710	- 6	-30 10 19.60	10 29.26	10 38.92	10 48.59	+ 6
1211	ω Cner	7 57 18.169	21.799	25.430	29.061	+ 8	+25 33 30.90	33 21.08	33 11.26	33 1.43	0
1212	232 G. Pupp	7 57 10.639	13.328	16.016	18.705	- 6	-18 14 0.72	14 10.58	14 20.44	14 30.30	- 50
1213	161 G. Mono	1 37 7 1	32.024	34.973	37.921	+ 7	- 6 10 7.7I	10 17.72	10 27.74	10 37.76	<b>— 28</b>
1214	Pi 7 <sup>h</sup> 308	8 6 17.403	21.309	25.214	29.119	+164	+35 38 11.15	38 0.42	37 49.68	37 38.94	-237
1215	3 H. UMaj	8 6*52.011	57-992	63.971	69.949	- 4	+68 39 11.68	39 1.14	38 50.60	38 40.05	+ 7
1216	+4° 1945	8 14 9.034	12.193	15.352	18.511	+ 1	+ 4 24 19.84	24 8.77	23 57.69	23 46.61	+ 1
1217	χ Cncr	8 16 25.355	29.001	32.646	36.291	- 14	+27 24 48.32	24 36.69	24 25.06	24 13.43	-386
1218	7 G. Hyda	8 16 22.479	25.353	28.227	31.101	- 43	- 9 58 38.86	58 50.07	59 1.28	59 12.49	+ 29
1219	294 G. Pupp	8 19 1.153	3.515	5.878	8.240	- 13	-32 51 44.93	51 56.35	52 7.77	52 19.19	+ 9
1220	20 Cncr	8 19*55.803	59.239	62.675	66.111	- 40	+18 31 34.55	31 23.02	31 11.50	30 59.96	- 30
1221	302G.Pupppr	8 22 28.225	30.815	33.406	35.997	- 22	-23 51 1.81	51 13.46	51 25.11	51 36.76	+ 27
1222	29 Cncr	8 25 16.526	19.874	23.222	26.570	- 13	+14 24 38.83	24 26.94	24 15.04	24 3.15	- 16
1223	δ Hyda	8 34 28.827	32.003	35.180	38.356	- 47	+ 5 54 51.00	54 38.47	54 25.95	54 13.42	— 12
1224	σ Hyda	8 35 37.310	40.446	43.582	46.718	- 13	+ 3 33 11.72	32 59.11	32 46.49	32 33.88	- 21
1225	34 Lync	8 36*52.735	56.884	61.032	65.180	+ 21	+46 2 45.55	2 32.96	2 20.37	2 7.77	+ 85
1226	53 G. Velr	8 38 38.042	40.033	42.024	44.015	- 6	-46 26 3.9I	26 16.70	26 29.49	26 42.28	+ 4
1227	o Velr¹)	8 38 34 439	36.159	37.879	39.598	- 22	-52 42 29.19	42 41.95	42 54.72	43 7.49	+ 22
1228	γ Cncr	8 39 48.980	52.452	55.925	59-397	<b>— 76</b>	+21 41 8.11	40 55.19	40 42.27	40 29.34	- 41
1229	25 G. Pyxi 14 Hyda	8 42 14.161	16.846	19.531	22.216	+ 4 - 18	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	57 9.25	57 22.27 13 35.92	57 35.28	$+25 \\ -23$
		. ,,,,			, ,						
1231	80 G. Hyda 64 Cncr	8 55*51.856	29.721	32.479 59.227	35.237 62.912	+ 23 - 37	-18 0 42.12 $+32$ 39 10.59	o 55.84 38 56.64	1 9.56 38 42.67	1 23.28 38 28.71	- 19 - 40
1232	109 G. Cari	8 55 30.329	31.797	33.266	34.734	- 20	-58*59 49.21	60 3.10	60 16.98	60 30.86	+ 12
1233	or G. Velr	8 57 50.902	53.141	55.381	57.620	- 40	-4I I 9.50	1 23.50	1 37.51	1 51.51	+ 39
1235	92 G. Hyda		57.120	60.185	63.250	- 37	- 0 14 49.42	15 3.45	15 17.48	15 31.52	+ 76
	93 G. Hyda		46.995	49.985	52.976	- 11	- 4 55 58.36	56 12.58	56 26.80	56 41.02	+ 5
1236	Pi 8h 245	9 0 44.004	46.952	50-770	54.587	- 27	+38 41 35.97	41 21.61	4I 7.24	40 52.87	- 22
1237	и Cncr	, ,,	33.161	36.410	39.660	- 17	+10 54 38.95	54 24.49	54 10.03	53 55.56	- 10
1239	E Cncr	9 4 29.911	58.185	61.635	65.085	0	+22 17 21.42	17 6.88	16 52.34	16 37.80	- I
1240	101 G. Hyda		21.697	24.573	27.450	+ 8	-12 6 49.64	7 4.22	7 18.79	7 33-37	- 15
	ε Pvxi		26.287	28.830		0	-30 7 10,22	7 24.89		7 54-24	- 45
1241	107 G. Hyda	9 7 23.744	16,521	19.269	31.373		-19 30 5.73		7 39.56	0.	+ 34
1242	9 Pyxi	9 9 13.7/2	52.771	55.427	58.084	- 39 - 7	-25 42 33.14	30 20.43	30 35.13 43 3.74	43 19.04	- 10
1244	и Leon	9 21 9.833	13.328	16.823	20.318	- 25	+26 26 30.21	26 14.74	25 59.26	25 43.79	- 49
1245	28 Hyda	9 22 24.007	27.007	30.007	33.007	- 11	- 4 51 27.98	51 43.48	51 58.99	52 14.50	- 14
1246	ξ Leon	9 28 42.789	46.023	49.257	52.491	- 66	+11 33 59.34	33 43.42	33 27.49	33 11.57	- 87
1247	160 G. Hyda	9 30 26.592	29.354	32.117	34.879	- 18	-20 50 57.55	51 13.46	51 29.38	51 45.30	+ 11
1248	17 G. Antl	9 34 34.802	37.385	39.967	42.550	+ 27	-31 54 29.43	54 45.60	55 1.77	55 17.94	- 24
1249	Br 1352	9 35 19.560	22.690	25.820	28.950	-108	+ 4 55 16.16	54 59.93	54 43.69	54 27.44	<b>— 55</b>
1250		9 36 47.511	50-575	53.639	56.703	+ 31	- 0 52 10.39	52 26.72	52 43.05	52 59.38	- 69

<sup>1)</sup> In B. J. 1936, S. A59, irrtümlich als 55 G. Velr bezeichnet

		R	e <b>k</b> tasze	nsion		μ		Deklina	tion		μ΄
Nr.	Name	1940	1941	1942	1943	in 0.0001	1940	1941	1942	1943	in 0."001
1251 1252 1253 1254 1255	15 Leon \$\psi\$ Leon +19\circ 2254 I Cari Br 1369	h m 8 9 40 2.474 9 40 27.953 9 42 32.114 9 43 35.886 9 44 43.727	5.992 31.220 35.448 37.534 47.600	9.510 34.488 38.781 39.183 51.472	13.028 37.755 42.115 40.831 55.344	- 18 - 1 + 16 - 18 +215	+30 15 4.38 +14 17 49.81 +18 57 39.11 -62 13 49.92 +46 18 5.74	14 47.85 17 33.36 57 22.55 14 6.51 17 48.99	14 31.31 17 16.91 57 5.98 14 23.09 17 32.24	14 14.78 17 0.46 56 49.41 14 39.68 17 15.48	-109 - 4 - 19 + 13 - 96
1256 1257 1258 1259 1260	162 G. Velr 18 G. Sext 20 LMin Pi 9h 229	9 49 0.234 9 53 9.074 9 57 33.425 10 0 37.851 10 1 34.592	2.558 12.054 36.885 41.843 37.364	4.882 15.035 40.345 45.833 40.137	7.206 18.015 43.805 49.824 42.909	- 29 - 20 -414 - 28 - 71	-45 54 44.91 - 7 21 36.44 +32 13 10.63 +54 10 58.47 -23*59 40.02	55 1.73 21 53.50 12 52.94 10 41.07 59 57.43	55 18.56 22 10.56 12 35.26 10 23.67 60 14.84	55 35.38 22 27.62 12 17.57 10 6.26 60 32.25	+ 35 - 6 -434 - 10 + 20
1261 1262 1263 1264 1265	u <sup>2</sup> Hyda 32 UMaj \$\varepsilon \text{Sext}\$ 187 G. Cari 59 G. Antl	10 2 12.089 10 13 42.030 10 14 38.847 10 15 4.557 10 15 22.393	·	17.932 50.757 44.809 8.563 27.892	20.853 55.119 47.791 10.567 30.641	- 26 -144 -109 - 32 - 14	-12 46 23.03 +65 24 31.05 - 7 46 6.95 -61 1 55.11 -28 41 29.03	46 40.48 24 13.11 46 24.91 2 13.09 41 47.01	46 57.93 23 55.17 46 42.88 2 31.07 42 5.00	47 15.38 23 37.22 47 0.84 2 49.04 42 22.98	+ 8 - 13 + 1 + 5 + 10
1266 1267 1268 1269 1270	23 Sext 27 LMin 204 G. Velr 64 G. Antl 8 Sext	10 17 *56.102 10 19 39.308 10 19 44.922 10 20 51.427 10 26 25.826	47.495 54.053	62.299 46.222 50.067 56.680 31.920	65.397 49.679 52.640 59.306 34.968	- 8 - 10 - 28 - 136 - 35	+ 2 35 31.93 +34 12 42.28 -41 20 51.01 -37 42 16.98 - 2 25 53.01	35 13.83 12 24.11 21 9.12 42 35.23 26 11.42	34 55.74 12 5.94 21 27.22 42 53.48 26 29.84	34 37.64 11 47.77 21 45.33 43 11.74 26 48.26	- 4 - 14 + 52 - 54 - 19
1271 1272 1273 1274 1275	+29° 2057 46 Leon 219 G. Velr 236 G. Hyda 37 LMin		62.901 27.297 35.981	38.795 66.105 29.831 38.968 27.665	42.161 69.308 32.365 41.955 31.042	$\begin{array}{c} + & 7 \\ - & 29 \\ + & 6 \\ + & 175 \\ + & 2 \end{array}$	+28 53 19.70 +14 26 44.65 -46 41 37.76 -11 54 27.18 +32 17 18.44	53 1.29 26 26.18 41 56.29 54 46.50 16 59.75	52 42.88 26 7.71 42 14.83 55 5.81 16 41.06	52 24.47 25 49.23 42 33.36 55 25.13 16 22.36	- 8 - 16 - 1 -680 + 1
1276 1277 1278 1279 1280	Pi 10h 135 78 G. Antl Br 1493 51 Leon 250 G. Hyda	10 40 1.842 10 39*56.094 10 42*58.259 10 43 10.713 10 43*51.488	5.37° 58.875 61.383 13.945 54.339	8.899 61.655 64.507 17.178 57.190	12.426 64.436 67.631 20.410 60.042	$     \begin{array}{r}       -260 \\       -23 \\       -8 \\       +64 \\       -121     \end{array} $	+46 31 11.02 -32 24 3.75 + 6 41 23.58 +19 12 30.06 -25 43 57.09	30 52.11 24 22.58 41 4.62 12 11.09 44 15.99	30 33.20 24 41.42 40 45.65 11 52.11 44 34.89	30 14.29 25 0.25 40 26.69 11 33.14 44 53.79	- 74 + 1 - 40 - 45 + 49
1281 1282 1283 1284 1285	41 Sext 47 UMaj α Crat 58 Leon 29 G. Leon	10 47 17.361 10 56 6.746 10 56 50.914 10 57 27.713 10 59 33.595	20.370 10.107 53.837 30.812 36.648	23.380 13.469 56.760 33.910 39.700	26.390 16.830 59.683 37.009 42.752	$ \begin{array}{rrr}  - 5 \\  -281 \\  -323 \\  + 8 \\  - 14 \end{array} $	- 8 34 46.06 +40 45 3.93 -17 58 44.01 + 3 56 24.25 - 3 11 21.67	35 5.12 44 44.71 59 3.17 56 4.93 11 41.05	35 24.19 44 25.49 59 22.34 55 45.61 12 0.44	35 43.26 44 6.27 59 41.51 55 26.28 12 19.82	- 21 + 49 +123 - 18 - 30
1286 1287 1288 1289 1290	11 G. Crat 65 Leon 259 G. Cari 260 G. Cari 275 G. Hyda		36.208 53.626 41.666 3.699 23.915	39.219 56.687 43.830 6.260 26.805	42.230 59.747 45.995 8.821 29.696	+ 10 $-255$ $- 39$ $- 8$ $+ 14$	-10 45 49.07 + 2 16 53.64 -70 33 10.99 -58 38 58.74 -32 6 27.30	46 8.60 16 34.11 33 30.45 39 18.23 6 46.85	46 28.12 16 14.57 33 49.92 39 37.72 7 6.40	46 47.64 15 55.03 34 9.38 39 57.21 7 25.96	-105 - 90 - 2 - 1 + 4
1291 1292 1293 1294 1295	9 G. Cent φ Leon 55 UMaj 28 G. Cent Pi 11 <sup>h</sup> 63	11 9 48.647 11 13 36.600 11 15*52.020 11 21 29.422 11 22 35.092	55.292 32.290 38.274	54.111 42.700 58.563 35.158 41.456	56.844 45.751 61.834 38.027 44.637	- 49 - 15 - 23	-48 46 29.40 - 3 19 24.01 +38 30 53.79 -42 20 21.82 +27 4 37.88	46 48.93 19 43.69 30 34.04 20 41.59 4 18.10	47 8.45 20 3.37 30 14.29 21 1.36 3 58.33	47 27.98 20 23.05 29 54.54 21 21.14 3 38.55	+ 41 - 43 - 77 - 10 + 3
1296 1297 1298 1299 1300	9 Crat	11 23 43.081 11 24*51.075 11 26 38.991 11 33 38.148 11 37*53.677		49.156 57.246 41.932 44.234 59.997	52.193 60.332 47.993 47.277 63.157	-482 + 12 - 12 - 43 - 12	+ 3 20 25.18 + 3 11 12.79 -27 41 59.02 - 9 28 12.88 +34 32 26.25	20 5.56 10 52.96 42 18.86 28 32.79 32 5.91	19 45.95 10 33.14 42 38.70 28 52.70 31 45.57	19 26.33 10 13.31 42 58.54 29 12.60 31 25.23	+177 - 17 - 7 + 4 -390

## Zusatzsterne des FK3 für 1940.0—1943.0

+,,,		Re	ktaszer	nsion		μ		Deklinat	ion		μ'
Nr.	Name	1940	1941	1942	1943	in of ocot	1940	1941	1942	1943	in 0."001
1301	ζ Crat ν Virg	h m s 11 41 43.098 11 42 46.509	46.139 49.593	8 49.180 52.677	52.221 55.761	+ 24 - 12	-18° 1′ 1.43 + 6 51 56.48	1 21.45 51 36.31	1 41.46 51 16.13	2 148 50 55.96	- 37 - 187
1303	Grb 1826 93 Leon	11 43*54.275 11 44*53.511	57.517 56.607	60.758 59.702	63.999 62.797	- 52 - 108	+61 44 9.10 +20 33 8.67	43 49.06 32 48.66	43 29.02 32 28.65	43 8.98 32 8.64	- 44 - 11
1305	298 G. Hyda		46.032	49.061	52.092 67.283	- 20	-26 24 57.62 $-4*59$ 58.67	25 17.63 60 18.69	25 37.65	25 57.67 60 58.74	— 11
1306	12 G. Virg Grb 1830 95 Leon	11 47*58.081	35.029	38.489	41.948	+ 3 +33881)	+38 8 57.48	8 31.66	60 38.72 8 5.83	7 40.01	- 5 -5803 <sup>2</sup> )
1308 1309 1310	η Crat Pi 11 <sup>h</sup> 202	11 52 35.431 11 52*57.257 11 55 2.450	38.517 60.314 5.533	41.603 63.371 8.616	44.689 66.428 11.699	+ 7 - 37 - 84	+15 58 50.41 -16 49 0.20 +32 36 31.95	58 30.38 49 20.25 36 11.85	58 10.34 49 40.29 35 51.74	57 50.30 50 0.34 35 31.63	- 3 - 11 - 69
1311	π Virg	11 57 47.869	50.944	54.018	57.093	- 2	+ 6 56 55.94	56 35.86	56 15.79	55 55.71	- 33
1312	311 G. Hyda 3 Coma	12 2*51.182 12 7 28.162	54.263 31.220	57-344 34-279	60.425 37·337	- 42 - 14	-35 21 35.11 $+17$ 8 34.84	8 14.80	7 54.76	7 34.72	+ 5 - 6
1314	Br 1636 14 Virg	12 11 45.338 12 16 14.731	48.315 17.819	51.292 20.906	54.268 23.994	- 25 0	+53 46 6.17 $-8$ 34 52.36	45 46.13 35 12.38	45 26.10 35 32.40	45 6.06 35 52.42	— 19 — 27
1316 1317	3 CVen 16 Virg	12 16*51.733 12 17 18,064	54.691 21.111	57.648 24.158	60.605	- 10 - 197	+49 19 1.24 + 3 38 47.56	18 41.25 38 27.51	18 21.27 38 7.45	18 1.28 37 47.40	+ 3 - 7°
1318	12 Coma 322 G.Hyda	12 19 29.456	32.473 12.719	35.489 15.860	38.505	- 9 + 3	+26 10 44.17 $-27 25 0.59$	10 24.19	10 4.21 25 40.53	9 44.22 26 0.50	- 13 - 20
1320	122 G. Cent	12 25 10.550	13.738	16.926	20,115	- 25	-38 42 32.81	42 52.75	43 12.69	43 32.63	- 20
1321	35 G. Corv Pi 12h 122	12 30 27.311 12 30 41.715	30.421 44.671	33.532 47.626	36.643 50.582	- 17 + 12	-12 30 0.82 +33 34 43.80	30 20.63 34 23.90	3° 4°.45 34 3.99	31 0.26	+ 50 - 39
1323 1324 1325	23 Coma 25 Virg 133 G. Cent	12 31*51.733 12 33 41.754 12 38 4.554	54.722 44.844 7.847	57.712 47.934 11.141	60.701 51.024 14.434	- 51 - 22 - 77	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	57 13.85 30 24.93 49 22.38	56 54.02 30 44.77 49 42.09	56 34.18 31 4.62 50 1.80	+ 15 - 20 + 54
1326	ρ Virg Υ CVen	12 38 50.815 12 42 18.897	53.851	56.888	59.925	+ 57	+10 33 57.59	33 37.74	33 17.89	32 58.04	- 94 + 10
1327	32 d <sup>2</sup> Virg	12 42 35.114 12 44 41.943	38.145	24.539	27.360	- 73	+45 46 4.67 + 7*60 4.12	45 44.98 59 44.43	45 25.29 59 24.73	59 5.04	+ 2
1329	35 Virg	12 44 48.004	45.131	48.319	51.508	- 31 - 5	-24 31 30.10 $+$ 3 54 0.09	31 49.73 53 40.42	32 9.36 53 20.76	32 28.99 53 1.09	- · 34 - · 5
1331 1332	143 G. Cent 31 Coma	12 47 25.39° 12 48 46.635	28.644 49.557	31.898 52.480	35.152 55.402	- 25 - 12	-33 40 20.89 +27 52 0.64	40 40.53 51 41.03	41 0.17 51 21.43	4I 19.80 5I 1.82	- 23 - 16
1333 1334	32 Coma 52 G. Corv	12 49 13.196 12 50 50.057	16.179 53.221	19.162 56.386	22.145 59.550	- 6 - 26	+17 23 59.57 $-17$ 42 44.31	23 39.97 43 3.86	23 20.38 43 23.41	23 0.78 43 42.96	- 17 - 2
1335 1336	ψ Virg	12 51 13.754		19.993	23.113	- 17 - 26	- 9 12 48.39 - 3 29 19.10	13 7.95 29 38.53	13 27.51 29 57.96	13 47.08 30 17.39	- 20 + 5
1337	14 CVen Grb 1956	13 2*56.225	59.031	61.837	64.643	- 26 - 18	+36 7 10.24 +45 35 20.41	6 50.96	6 31.69	6 12.42	+ 16 + 25
1338	39 Coma 177 G. Cent	13 3 10.455 13 3 25.750	28.674	31.597	34.521	- 55	+21 28 29.89 -53 8 20.41	28 10.57 8 39.71	27 51.24 8 59.01	27 31.92 9 18.30	- 46 - 32
1340	342 G. Hyda	13 8 23.081		29.607	14.243 32.870	- 41 - 41	-26 13 59.50	14 18.66	14 37.82	14 56.98	- 6
1342 1343	195 G. Cent	13 13 32.753 13 13 44.501	36.084 47.977	39.416	42.748 54.929	+ 30	-31 11 20.74 -43 39 47.28	40 6.30		12 17.95 40 44.35	- 52 - 13
1344 1345	σ Virg 61 Virg	13 14 34.390 13 15 15.663	37.420	40.449	43.479 25.076	- 5	+ 5 47 7.78 -17 58 41.10	46 48.80 59 1.14	46 29.82 59 21.19	46 10.85 59 41.23	
1346 1347	23 CVen J Cent	13 17 37.743 13 18 44.217		43.121 51.959	45.809	- 53 - 39	+40 27 53.82 -60 40 27.50	27 34.90 40 46.38	27 15.99 41 5.26	26 57.08 41 24.14	
1348	68 Virg	13 23 32.711	35.880	39.048	42.217	- 93	-12 23 45.74	24 4.49	24 23.24	24 41.99 4 57.46	- 24
1349	70 Virg +31° 2493	13 25 29.658 13 25 32.305		35.527 37.855	38.461	+ 2	+14 5 55.19 +31 27 34.30				

<sup>1)</sup>  $\mu$  ab 1941.0:  $+0^{\circ}.3387$  2)  $\mu$  ab 1941.0:  $-5.{''}.804$ 

7.5		Re	ektaszei	nsion		μ		Deklinat	ion		μ'
Nr.	Name	1940	1941	1942	1943	in o.ocor	1940	1941	1942	1943	in 0."001
1351 1352 1353 1354 1355	78 Virg 80 Virg Grb 2017 355 G. Hyda 82 Virg	m 8 13 31 5.358 13 32 23.799 13 32 40.920 13 38 11.824 13 38 27.553	8.399 26.920 43.474 15.134 30.702	11.439 30.041 46.028 18.444 33.850	14.479 33.162 48.582 21.754 36.999	+ 28 + 10 - 21 - 7 - 67	+ 3 57 59.32 - 5 5 28.71 +44 30 11.40 -23 8 48.91 - 8 24 3.42	57 40.82 5 47.08 29 52.99 9 7.14 24 21.60	57 22.31 6 5.44 29 34.58 9 25.36 24 39.79	57 3.80 6 23.80 29 16.17 9 43.59 24 57.97	- 29 + 73 + 12 + 2 + 35
1356 1357 1358 1359 1360	253 G. Cent 83 Virg 3 Boot +9° 2814 +32° 2411	13 38 59.731 13 41 15.284 13 43*56.141 13 46 45.269 13 53 30.716	63.646 18.520 58.927 48.249 33.377	67.562 21.757 61.713 51.229 36.037	71.479 24.994 64.499 54.210 38.698	- 24 + 9 - 16 - 10 - 106	-56 27 56.45 -15,52 40.98 +25 60 9.28 + 8 42 21.16 +32 19 29.16	28 14.67 52 59.11 59 51.19 42 3.26 19 11.57	28 32.87 53 17.23 59 33.12 41 45.35 18 53.98	28 51.08 53 35.36 59 15.04 41 27.45 18 36.40	- 10 - 12 - 64 0 + 45
1361 1362 1363 1364 1365	48 Hyda 204 G, Virg 307 G, Cent 210 G, Virg	13 59 24.938 13 59 47.478 14 1 11.784	41.494 45.635 30.761 51.130 15.032	44.852 48.743 36.587 54.783 18.279	48.211 51.852 42.416 58.435 21.526	-145 - 20 -241 - 40 - 26	-24 43 6.13 - 3 15 29.94 -76 30 30.72 -41 8 5.89 -14 41 3.00	43 23.73 15 47.50 30 48.13 8 23.28 41 20.33	43 41.33 16 5.07 31 5.54 8 40.68 41 37.66	43 58.92 16 22.63 31 22.95 8 58.07 41 54.98	- 99 - 68 - 34 - 32 - 24
1366 1367 1368 1369 1370	94 Virg +39° 272° 9 H. Boot 236 G. Virg A Boot	14 3 6.894 14 3 55.497 14 5 31.852 14 15 18.831 14 15 27.589	10.071 58.020 34.250 22.147 30.125	13.248 60.543 36.649 25.464 32.661	16.425 63.066 39.047 28.781 35.197	+ 1 + 9 + 7 - 46 - 3	- 8 36 21.98 +38 42 10.76 +44 8 21.15 -18 26 20.75 +35 47 8.17	36 39.18 41 53.57 8 4.01 26 37.44 46 51.54	36 56.38 41 36.38 7 46.88 26 54.13 46 34.91	37 13.58 41 19.20 7 29.74 27 10.82 46 18.28	+ 18 - 7 - 29 - 42 + 12
1371 1372 1373 1374 1375	λ Virg 18 Boot ψ Cent 2 Libr 244 G. Virg	14 15*51.506 14 16 21.941 14 16*53.901 14 20 11.629 14 21 12.032	54-752 24.844 57-547 14.856 15.017	57.997 27.747 61.194 18.084 18.003	61.243 30.651 64.841 21.312 20.988	- 12 + 71 - 58 - 8 - 54	-13 5 45.10 +13 16 48.86 -37 36 37.03 -11 26 27.44 + 6 5 29.14	6 1.70 16 32.23 36 53.61 26 43.91 5 12.79	6 18.29 16 15.60 37 10.19 27 0.38 4 56.44	6 34.88 15 58.97 37 26.77 27 16.85 4 40.09	+ 24 - 34 - 10 - 63 + 5
1376 1377 1378 1379 1380	3 G. Libr τ¹ Lupi 22 Boot 5 UMin σ Boot	14 21 22.836 14 22 16.451 14 23 39.821 14 27 37.475 14 32 4.029	26.258 20.299 42.612 37.340 6.641	29.680 24.147 45.402 37.207 9.254	33.103 27.996 48.192 37.075 11.866	- 40 - 14 - 52 + 12 +146	-24 32 6.16 -44 57 3.74 +19 29 44.73 +75 57 45.86 +29*60 17.67	32 22.54 57 20.06 29 28.52 57 29.86 60 2.01	32 38.91 57 36.37 29 12.32 57 13.85 59 46.35	32 55.28 57 52.68 28 56.11 56 57.84 59 30.69	- 27 - 15 + 21 + 21 + 128
1381 1382 1383 1384 1385	10 G. Libr 32 Boot 34 Boot +33° 2489 56 Hyda	14 33 48.003 14 38 50.445 14 40 47.084 14 42 43.034 14 44 14.261	53·327 49·721	54.386 56.209 52.358 48.053 21.264	57.578 59.091 54.995 50.562 24.766	-591 -108 - 10 + 30 + 32	-12 3 4.78 +11 55 5.24 +26 46 55.25 +33 2 29.58 -25 50 13.28	3 20.12 54 49.70 46 39.92 2 14.29 50 28.40	3 35.45 54 34.17 46 24.60 1 59.02 50 43.50	3 50.78 54 18.64 46 9.28 1 43.74 50 58.61	+ 361 - 118 - 19 - 82 - 1
1386 1387 1388 1389	Grb 2152 \alpha^1 Libr +6° 2957 381 G. Cent \xi^2 Libr	14 46 45.316 14 47 21.776 14 50 41.496 14 52 3.285 14 53 30.478	25.094 44.464 6.967 33.733	50.026 28.411 47.432 10.648 36.988	52.382 31.729 50.401 14.330 40.243	$     \begin{array}{r}       -220 \\       -69 \\       \hline       +21 \\       +4     \end{array} $	+38 3 27.46 -15 44 56.23 + 6 29 9.39 -33 36 48.03 -11 10 7.23	3 12.60 45 11.24 28 54.66 37 2.69 10 21.79	2 57.74 45 26.24 28 39.94 37 17.34 10 36.35	2 42.89 45 41.24 28 25.22 37 31.99 10 50.91	+ 108 - 75 + 8 - 5 + 4
1391 1392 1393 1394 1395	33 G. Libr Pi 14 <sup>h</sup> 227 Br 1908 8 Libr 47 Boot	14 53*57.383 14 54 21.322 14 54 28.463 14 57 45.753 15 3 26.508	31.539 48.958 28.495	64.389 26.729 34.615 52.163 30.482	67.893 29.433 37.691 55.368 32.469	+742 - 10 + 42 - 44 - 68	-21 8 45.78 +21 47 47.31 + 0 4 23.28 - 8 16 55.17 +48 22 55.42	9 2.06 47 32.77 4 8.75 17 9.48 22 41.49	9 18.34 47 18.23 3 54.22 17 23.80 22 27.57	9 34.61 47 3.7° 3 39.69 17 38.11 22 13.64	$     \begin{array}{r}       -1740 \\       -25 \\       -27 \\       -8 \\       +29     \end{array} $
1396 1397 1398 1399 1400	45 Boot +55° 173° ×1 Lupi 1 Lupi Pi 15 <sup>h</sup> 36	15 4 39.852 15 4 33.726 15 7 45.059 15 10*56.360 15 15 42.991	35.439 49.226 60.034	45.122 37.152 53.394 63.709 48.370	47.757 38.865 57.562 67.383 51.060	+135 + 51 -100 - 2 - 9	+25 6 6.52 +54 47 11.73 -48 30 40.05 -31 17 47.23 +20 47 27.82	5 52.46 46 57.86 30 53.79 18 0.71 47 14.63	5 38.41 46 43.98 31 7.52 18 14.18 47 1.45	5 24.36 46 30.10 31 21.24 18 27.66 46 48.26	- 174 + 9 - 51 - 2 - 23

		Re	ektaszei	nsion		μ		Deklinat	cion	4	μ'
Nr.	Name	1940	1941	1942	1943	in o\$ccoi	1940	1941	1942	1943	in 0."001
1401 1402 1403 1404	+10° 2823 δ Lupi φ² Lupi 73 G. Libr 30 Libr	h m 8 15 15 49.088 15 17 25.470 15 19 18.846 15 19 21.628 15 19 40.695	29.405 22.678 25.212	54.843 33.341 26.509 28.797 47.386	57.720 37.278 30.341 32.381	- 63 - 13 - 14 + 24 - 2	+10 38 43.65 -40 25 54.01 -36 38 40.97 -26 28 31.91 -14 55 16.38	38 30.49 26 7.09 38 53.92 28 44.84 55 29.27	38 17.34 26 20.16 39 6.87 28 57.77 55 42.16	38 4.18 26 33.24 39 19.81 29 10.70 55 55.04	+ I - 27 - 25 - 8 + II
1405 1406 1407 1408 1409	8 Serp 32 Libr +9° 3055 37 Libr 115 G. Lupi	15 20 37.914 15 24*52.066 15 28 0.504 15 30*53.667 15 32 4.898	41.007 55.449 3.417 56.946	44.100 58.832 6.330 60.224 13.111	50.731 47.192 62.215 9.243 63.503 17.218	+ 49 + 10 + 24 +204 - 48	- 0 48 34.50 -16 30 31.06 + 8 46 59.29 - 9 51 36.77 -44 11 49.79	48 47.37 30 43.65 46 46.95 51 49.15 12 1.89	30 56.24 46 34.62 52 1.53 12 13.98	49 13.10 31 8.82 46 22.28 52 13.90 12 26.07	- 31 - 36 - 2 -241 - 44
1411 1412 1413 1414 1415	2 G. Norm Pi 15h 153 x Libr x CorB λ Libr	15 34 21.177 15 36 20.774 15 38 29.066 15 48*58.163 15 49 50.777	22,695	30.086 24.616 35.978 62.684 57.742	34.542 26.537 39.435 64.944 61.225	- 39 + 81 - 27 - 10 - 7	-52 10 35.28 +46 59 40.63 -19 29 8.93 +35 50 32.90 -19 59 20.96	10 47.21 59 28.74 29 20.64 50 21.70 59 31.76	10 59.14 59 16.86 29 32.35 50 10.51 59 42.56	11 11.06 59 4.99 29 44.06 49 59.32 59 53.36	- 40 -126 -111 -353 - 28
1416 1417 1418 1419 1420	χ Herc 48 Libr 144 G. Lupi 49 Libr 50 Libr	15 50 35.937 15 54 49.505 15 55 24.623 15 56*57.287 15 57 33.042	38.010 52.864 28.708 60.653 36.280	40.084 56.224 32.794 64.020 39.519	42.158 59.583 36.880 67.386 42.758	+393 - 10 - 22 -441 - 12	+42 37 6.62 -14 6 27.84 -41 34 25.64 -16 21 29.11 - 8 14 35.10	36 56.53 6 38.27 34 36.02 21 39.76 14 45.33	36 46.43 6 48.70 34 46.39 21 50.40 14 55.54	36 36.34 6 59.12 34 56.75 22 1.04 15 5.76	+627 - 22 - 10 -397 - 18
1421 1422 1423 1424 1425	κ Herc pr +6° 3169 τ CorB δ¹ Apds 17 Herc	16 5 21.906 16 6 13.756 16 6 46.532 16 11 18.447 16 13 43.080	24.613 16.710 48.726 27.388 45.638	27.321 19.664 50.919 36.332 48.196	30.028 22.618 53.112 45.279 50.754	$ \begin{array}{r} -25 \\ +157 \\ -48 \\ -24^{1}) \\ -12 \end{array} $	+17 12 19.76 +6 32 54.58 +36 38 32.03 -78 32 54.34 +23 16 14.36	12 10.14 32 44.32 38 22.85 33 3.53 16 5.38	12 0.52 32 34.05 38 13.68 33 12.70 15 56.41	11 50.91 32 23.79 38 4.50 33 21.86 15 47.44	- II -724 +325 - 37 - I4
1426 1427 1428 1429 1430	55 G. Scor sq σ Serp 23 Herc 21 Herc 22 G. Ophi	16 15 44.662 16 19 1.854 16 20 38.148 16 21 15.302 16 26 23.181	18.224	52.250 7.930 42.753 21.146 29.962	56.045 10.968 45.055 24.068 33.353	+ 66 -106 + 9 - 1 + 20	-30 45 46.13 + 1 10 7.16 +32 28 18.93 + 7 5 8.11 -14 25 14.19	45 54.91 9 58.66 28 10.50 4 59.76 25 22.14	46 3.69 9 50.17 28 2.08 4 51.41 25 30.07	46 12.46 9 41.68 27 53.65 4 43.07 25 38.01	+ 21 + 50 - 10 + 18 + 16
1431 1432 1433 1434 1435	N Scor Pi 16h 140 12 Ophi 42 Herc η Arae	16 27 27.343 16 31 34.431 16 33 12.161 16 37 6.981 16 44 35.573	31.263 35.277 15.312 8.610 40.750	35.183 36.124 18.463 10.238 45.928	39.102 36.970 21.614 11.867 51.106	$ \begin{array}{r} -6 \\ +18 \\ +302 \\ -48 \\ +43 \end{array} $	-34 34 31.27 +60 56 54.90 - 2 11 53.01 +49 2 41.86 -58 56 11.59	34 39.15 56 47.34 12 0.73 2 34.81 56 18.10	34 47.04 56 39.79 12 8.45 2 27.75 56 24.59	34 54.91 56 32.24 12 16.17 2 20.70 56 31.08	$ \begin{array}{r} -15 \\ -13 \\ -315 \\ +32 \\ -30 \end{array} $
1436 1437 1438 1439 1440	19 Ophi -21° 4422 20 Ophi μ¹ Scor 51 Herc	16 44 8.071 16 46 0.059 16 46 30.676 16 47*48.040 16 49 15.922	3.637 33.994 52.103 18.409	14.118 7.215 37.313 56.166 20.896	17.142 10.793 40.632 60.229 23.383	- 16 - 8 + 63 - 8 + 9	+ 2 10 16.64 -21 44 54.98 -10 40 42.58 -37 56 46.73 +24 45 22.04	10 10.11 45 1.36 40 49.00 56 52.97 45 15.97	10 3.59 45 7.73 40 55.40 56 59.20 45 9.89	9 57.08 45 14.10 41 1.81 57 5.42 45 3.82	- 12 - 20 - 97 - 28 + 9
1441 1442 1443 1444 1445	53 Herc t Ophi 51 G. Apds 24 G. Arae 30 Ophi	16 50 41.394 16 51 10.012 16 52*37.276 16 53 39.651 16 57 53.577	12.850 45.518 44.279	45.943 15.689 53.761 48.907 59.903	48.217 18.527 62.006 53.536 63.066	- 78 - 35 - 99 <sup>2</sup> ) - 14 - 34	+31 47 59.39 +10 15 45.87 -76 7 29.84 -50 32 54.33 - 4 8 3.12	47 53.41 15 39.90 7 35.79 33 0.10 8 8.56	47 47.42 15 33.94 7 41.73 33 5.85 8 14.00	47 41.44 15 27.98 7 47.66 33 11.60 8 19.43	- 19 - 37 -149 - 44 - 78
1446 1447 1448 1449 1450	59 Herc 80 G. Ophi Pi 16 <sup>h</sup> 307 85 G. Ophi 88 G. Ophi	17 3 15.158 17 4 45.614	13.660 16.984 49.098	27.758 17.377 18.811 52.581 35.392	29.973 21.095 20.638 56.064 38.709	- 4 + 2 0 + 2 + 38	+33 39 14.25 -26 26 0.79 +43 53 34.11 -17 31 52.44 -10 26 47.32	39 9.01 26 5.73 53 29.20 31 57.26 26 52.06	39 3.77 26 10.66 53 24.29 32 2.07 26 56.79	38 58.53 26 15.58 53 19.38 32 6.88 27 1.52	- 4 - 19 - 1 - 35 -101

<sup>1)</sup> μ für 1943.0: —o.soo23 2) μ ab 1941.0: —o.soo98

_		Re	ektasze	nsion		μ		Deklina	tion		μ'
Nr.	Name	1940	1941	1942	1943	in 0.0001	1940	1941	1942	1943	in 0."001
1451	97 G. Ophi	h m s 17 8 51.492	54.385	s 57.277	60.170	+18	+ 7 57 58.90	57 54.48	57 50.06	57 45.65	+ 11
1452	139 G. Scor	17 13 9.237	13.139	17.041	20.944	<del>-76</del>	$-32\ 35\ 48.70$	35 52.82	35 56.94	36 1.04	- 53
1453	U Ophi	17 13 28.911	31.954	34.998	38.041	<b>— 5</b>	+ 1 16 33.21	16 29.15	16 25.10	16 21.06	- 16
1454	Pi 17h 68	17 17 40.086	. , ,	45.373	48.016	+ 2	+18 7 2.93	6 59.20	6 55.47	6 51.74	- 54
1455	59 G. Apds	17 20 11.685	22.895	34.108	45.322	+25	-80 48 31.49	48 34.99	48 38.47	48 41.93	— 41
1456	72 Herc	17 18 24.712		29.200	31.445	$+96^{1}$ )	+32 32 37.50	32 32.85	32 28.19	32 23.54	-1043
1457	44 Ophi	17 22 42.186		49.513	53.177	0	-24 7 18.71	7 22.07	7 25.43	7 28.78	- 116
1458	138 G. Ophi	17 22*50.887		57.117	60.232	+-48	- I 36 3.49	36 6.68	36 9.86	36 13.04	+ 47
1459	σ Ophi	17 23 32.124		38.077	41.053	— I	+ 4 11 27.61	11 24.44	11 21.27	11 18.12	+ 6
1460	λ Herc	17 28 18.700	21.124	23.549	25.973	+11	+26 9 16.71	9 13.97	9 11.23	9 8.49	+ 18
1461	-11° 4411	17 31 25.980		32.649	35.984	-10	-11 12 10.56	12 13.04	12 15,52	12 18,00	+ 6
1462	Grb 2444	17 31 12.913	14.815	16.717	18.619	-7 <sup>1</sup>	+41 17 5.55	17 2.97	17 0.40	16 57.84	- 64
1463	58 Ophi	17 39*49.947		57.137	60.732	-67	-21 39 20.93	39 22.74	39 24.54	39 26.34	- 48.
1464	X Sgtr	17 43 46.884	_	54.436	58.212	- 2	-27 48 35.18	48 36.60	48 38.02	48 39.43	- 9
1465	+20° 3570	17 45 50.174	52.747	55.321	57.894	+ 9	+20 35 2.41	35 1.18	34 59.94	34 58.71	0
1466	+9° 3485	17 47 18.736		24.413	27.251	-27	+ 9 51 54.94	51 53.78	51 52.62	51 51.47	- 52
1467	-7° 4523	17 51 42.494		48.995	52.246	-35	- 7 43 24.I3	43 24.91	43 25.68	43 26.45	- 57
1468	89 Herc	17 52*59.836		64.675	67.095	- 2	+26 3 29.98	3 29.37	3 28.77	3 28.17	+ 6
1469	93 Herc	17 57 23.075	25.746	28.416	31.086	- 5	+16 45 10.59	45 10.35	45 10,12	45 9.89	- 11
1470	6 Sgtr	17 57*53.835	57.320	60.806	64.291	- 2	-17 9 22,68	9 22.87	9 23.05	9 23.23	- 7
1471	9 Arae	18 1*57.521	62.191	66.860	71.530	-14	-5° 5 51.5°	5 51.34	5 51.18	5 51.01	- 18
1472	-13° 4863	18 6 18.885	22.290	25.695	29.100	+ 1	-13 56 45.75 ·	56 45.19	56 44.63	56 44.06	+ I
1473	ε Tele	18 6 46.479		55.385	59.838	-15	-45 58 o.74	58 0.18	57 59.61	57 59.03	- 31
1474 1475	6 G. Tele Br 2292	18 12 4.181 18 14 5.829	9.234	14.286	19.338	-22 - I	-56 2 39.91 - 9 46 50.55	2 38.87	2 37.81	2 36.75 46 47.03	- 12 - 64
1476 1477	74 Ophi z Lyra	18 17*52.239 18 17 45.430	55.233 47.532	58.228	61.223 51.736	- 4 -17	+36 2 11.29	20 57.09	20 58.67	21 0.25	+ 10 + 42
1478	+7° 3682	18 22 45.516		51.287	54-173	- 6	+ 7 59 48.73	59 50.71	59 52.70	59 54.69	- 6
1479	+29° 3259	18 23 39.786		44.411	46.723	+ 2	+29 47 35.55	47 37.59	47 39.64	47 41.70	- 22
1480	60 Serp	18 26 33.552	36.674	39.795	42.917	+18	- 2 I 32.38	1 30.09	1 27.80	1 25.51	- 33
1481	+16° 3529	18 28 24.209	26.876	29.544	32.211	-32	+16 53 8.14	53 10.59	53 13.05	53 15.51	- 27
1482	α Scut	18 31*56.460	,	62.989	66.253	-15	- 8 17 15.51	17 13.04	17 10.56	17 8.07	- 312
1483	Grb 2603	18 32 5.870	7.564	9.259	10.953	- i	+46 10 15.83	10 18.65	10 21.46	10 24.28	+ 14
1484	$+9^{\circ}$ 3783	18 33 36.010	38.871	41.732	44.593	-10	+ 9 4 25.69	4 28.49	4 31.30	4 34.11	- 126
1485	83 G. Sgtr	18 34 18.840	22.432	26.024	29.616	- 2	-21 26 56.74	26 53.82	26 50.89	26 47.96	- 70
1486	δ Scut	18 38*59.258	62.543	65.827	69,112	+ 3	- 9 6 41.49	6 38.10	6 34.70	6 31.29	0
1487	φ Sgtr	18 41*54.473	58.221	61.969	65.717	+39	-27 3 15.24	3 11.59	3 7.94	3 4.28	+ I
1488	$+26^{\circ}$ 3349	18 43 39.325	41.743	44.160	46.577	+12	+26 35 48.33	35 52.15	35 55.98	35 59.81	+ 25
1489	β Scut	18 43*59.401	62.584	65.767	68.949	- 8	- 4 48 49.09	48 45.28	48 41.46	48 37.65	- 17
1490	η¹ CorA	18 44 30.734	35.064	39-394	43.724	+21	-43 44 50.20	44 46.34	44 42.48	44 38.61	- 13
1491	III Herc	18 44 22.203		27.501	30.150	+48	+18 6 48.09	6 52,06	6 56.04	7 0.02	+ 114
1492	Grb 2671	18 45 22.592	23.933	25.273	26.613	+ 9	+52 55 16.83	55 20.77	55 24.72	55 28.66	- 3
1493	30 Sgtr	18 47 14.048	17.653	21.259	24.864	-21	-22 13 57.26	13 53.19	13 49.11	13 45.02	- 31
1494	50 Drac	18 48 19.090		15.218	13.281	-53	+75 21 51.35	21 55.62	21 59.89	22 4.16	+ 78
1495	114 G. Sgtr	18 52 3.610	7.065	10.520	13.975	-24	-16 27 4.75	27 0.42	26 56.09	26 51.75	— 18 <sub>7</sub>
1496	τ Sgtr	19 3 11.696		19.187	22.933	-42	-27 45 35.56	45 30.35	45 25.13	45 19.91	- 250
1497	21 G. Aqil	19 3 28.745		34.958	38.064	+10	- I 26 22,20	26 16.72	26 11.25	26 5.76	- 9
1498	Pi 18h 318	19 4 14.785		19.546	21.926	+55	+28 31 59.14	32 4.78	32 10.42	32 16,06	+ 87
1499	42 G. Octn 20 Aqil	19 8 15.376 19 9 25.407		31.692	39.848 35.169	- 2 + 6	-75 54 12.45 $-8$ 2 28.94	54 6.57 2 22.97	2 16.99	53 54.79	- 12 - 7
-300	-0	7 9 45.40/		391)	33.109		2 20.94	2 22.9/	- 10.99	2 11,01	/

<sup>1)</sup>  $\mu$  ab 1942.0: + 0.0097

## Zusatzsterne des FK3 für 1940.0—1943.0

		R	ektasze	nsion	Π,	μ		Deklinat	ion		μ'
Nr.	Name	1940	1941	1942	1943	in o.º0001	1940	1941	1942	1943	in 0."001
1501 1502 1503 1504	162 G. Sgtr β <sup>1</sup> Sgtr 31 Aqil 59 G. Tele	h m s 19 15 41.530 19 18 19.650 19 22 6.487 19 22*59.365	45.506 23.963 9.348 64.187	8 49.481 28.276 12.208 69.007	8 53.457 32.589 15.068 73.828	+ 3 + 1 +489 - 2	-35 31 56.12 -44 34 25.01 +11 48 52.56 -54 26 49.35	31 49.62 34 18.30 49 0.23 26 42.23	31 43.11 34 11.60 49 7.90 26 35.10	31 36.60 34 4.88 49 15.58 26 27.97	- 2 - 19 +639 + 15
1505	Br 2462 Grb 2844	19 23 51.093 19 24 6.693	53.7 <sup>1</sup> 7 8.5 <sup>2</sup> 2	56.341	58.965 12.181	- 8 - 46	+19 46 15.37 +44 48 39.63	46 22.49 48 46.75	46 29.62 48 53.87	46 36.76 49 0.99	- 46 - 76
1507 1508 1509 1510	Pi 19h 156 α Vulp 36 Aqil 8 Cygn	19 24 41.599 19 26 12.440 19 27 31.526 19 29 32.428		43.768 17.432 37.800 36.885	44.852 19.928 40.937 39.114	- 20 - 97 + 9 - 6	+57 54 21.00 +24 32 32.13 - 2 54 55.19 +34 19 27.56	54 28.25 32 39.39 54 47.73 19 35.19	54 35.5° 32 46.65 54 40.26 19 42.83	54 42.75 32 53.92 54 32.78 19 50.47	+ 9 -103 - 6
1511 1512 1513 1514 1515	μ Aqil 54 Sgtr β Sgte 55 Sgtr 10 Vulp	19 31 9.440 19 37 17.189 19 38 21.180 19 39 5.248 19 41 13.149	12.370 20.626 23.874 8.680 15.643	15.301 24.063 26.568 12.111 18.137	18.231 27.499 29.262 15.542 20.631	+141 + 46 + 2 + 42 + 4	+ 7 15 0.69 -16 25 56.35 +17 20 8.61 -16 15 58.16 +25 37 37.82	15 8.31 25 48.14 20 16.92 15 49.77 37 46.40	15 15.92 25 39.92 20 25.23 15 41.38 37 55.00	15 23.54 25 31.70 20 33.54 15 32.98 38 3.59	-155 - 45 - 34 - 11 + 20
1516 1517 1518 1519 1520	228 G. Sgtr 56 Sgtr 75 G. Pavo 90 G. Aqil t Sgtr	19 42 11.675 19 42*51.799 19 49 27.001 19 50 10.184 19 51 7.573	15.503 55.298 32.245 13.327 11.712	19.331 58.798 37.488 16.469 15.851	23.159 62.297 42.731 19.611 19.990	+ 2 - 95 + 13 + 14 + 7	-32 3 17.88 -19 54 24.91 -61 19 40.62 - 3 16 16.44 -42 1 39.72	3 9.26 54 16.30 19 31.39 16 7.15 1 30.32	3 0.62 54 7.68 19 22.16 15 57.86 1 20.92	2 51.99 53 59.06 19 12.92 15 48.57 1 11.50	- 19 - 87 + 9 + 16 + 56
1521 1522 1523 1524 1525	η Cygn 61 Sgtr 15 Vulp τ Aqil 28 Cygn	19 54 3.225 19 54 32.903 19 58 37.690 20 I 12.435 20 7 11.812	5.475 36.305 40.161 15.365 14.039	7.726 39.7°7 42.631 18.295 16.267	9.976 43.109 45.101 21.224 18.494	- 3° + 7 + 4° + 5 - 2	+34 55 22.69 -15 39 7.59 +27 35 12.06 + 7 6 26.50 +36 39 43.17	55 32.24 38 58.08 35 21.99 6 36.63 39 53.75	55 41.78 38 48.56 35 31.92 6 46.76 40 4.33	55 51.33 38 39.04 35 41.86 6 56.90 40 14.91	- 27 - 96 + 10 + 16 + 15
1526 1527 1528 1529 1530	ρ Aqil α <sup>1</sup> Capr 83 G. Tele 4 Capr 290 G. Sgtr	20 11 29.979 20 14 19.390 20 14 38.192 20 14 30.015 20 16*59.644	32.755 22.715 42.496 33.540 63.517	35.53° 26.04° 46.8°° 37.065 67.39°	38.306 29.365 51.104 40.589 71.262	+ 36 + 11 + 6 + 23 + 14	+15 0 48.67 -12 41 42.09 -47 53 54.40 -21 59 48.57 -35 51 51.53	o 59.61 41 31.00 53 43.28 59 37.50 51 40.22	1 10.55 41 19.90 53 32.16 59 26.42 51 28.90	1 21.49 41 8.80 53 21.03 59 15.34 51 17.58	+ 55 + 3 + 5 - 29 + 28
1531 1532 1533 1534 1535	132 G. Aqil 296 G. Sgtr 69 Aqil 41 Cygn 42 Cygn	20 20 12.276 20 21 46.593 20 26 30.856 20 26*56.543 20 27 2.979	15.248 50.266 33.991 58.994 5.267	18.220 53.940 37.127 61.445 7.555	21.192 57.613 40.262 63.896 9.844	- 25 + 8 + 44 + 2 + 1	+ 5 9 0.04 -28 51 33.18 - 3 5 10.63 +30 10 2.15 +36 15 12.65	9 11.52 51 21.54 4 58.69 10 14.14 15 24.65	9 23.00 51 9.89 4 46.74 10 26.13 15 36.65	9 34.48 50 58.23 4 34.79 10 38.12 15 48.66	- 35 + 19 - 15 - 3 + 2
1536 1537 1538 1539 1540	29 G. Capr 9 G. Delf Grb 3241 29 Vulp 13 G. Micr	20 29 6.778 20 31 0.695 20 30 16.986 20 35 50.439 20 36 34.274	3.682 16.733 53.118 38.039	13.342 6.669 16.479 55.797 41.804	16.624 9.655 16.225 58.476 45.569	+202 + 6 - 14 + 44 + 26	-10 3 33.92 + 4 41 33.18 +72 19 42.98 +20*59 22.36 -33 38 43.37	3 21.67 41 45.45 19 55.18 59 34.97 38 30.66	3 9.42 41 57.72 20 7.39 59 47.59 38 17.95	2 57.17 42 9.99 20 19.59 60 0.21 38 5.24	+102 - 6 - 16 + 7 + 50
1541 1542 1543 1544 1545	γ Delf sq ι Micr 3 Aqar Grb 3285 -1° 4057	20 43*52.398 20 44 25.490 20 44 34.319 20 44 36.746 20 46 12.116	37.484 38.485	57.964 33.628 40.649 40.224 18.284	60.746 37.696 43.814 41.963 21.368	$ \begin{array}{rrr}  - 28 \\  + 167 \\  - 3 \\  - 97 \\  - 24 \end{array} $	+15 54 25.21 -44 12 31.06 - 5 14 54.93 +52 46 34.27 - 0 47 10.13	54 38.16 12 17.98 14 41.78 46 47.35 46 56.85	54 51.11 12 4.90 14 28.62 47 0.44 46 43.56	55 4.07 11 51.81 14 15.46 47 13.53 46 30.27	-193 -102 - 37 -106 - 12
1546 1547 1548 1549 1550	ω Capr μ Aqar 64 G. Capr 33 Vulp γ Micr	20 48 14.645 20 49 25.116 20 54 19.194 20 55 35.306 20 57 36.928	28.352 22.553 37.988	21.807 31.587 25.911 40.670 44.290	25.387 34.823 29.269 43.351 47.97°	$ \begin{array}{r}  - 7 \\  + 26 \\  + 31 \\  - 6 \\  \hline                                 $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8 28.42 12 21.22 15 35.56 5 48.71 29 22.86	8 14.99 12 7.74 15 21.74 6 2.62 29 8.82	8 1.55 11 54.25 15 7.91 6 16.53 28 54.78	- 2 - 28 - 6 + 6

		R	ektasze	nsion		μ		Deklina	tion		μ'
Nr.	Name	1940	1941	1942	1943	in o.oooi	1940	1941	1942	1943	in 0."001
1551 1552 1553 1554 1555	59 Cygn ϑ Capr ۰° 4161 o Pavo γ Equl	1 m s 20 57 46.994 21 2 34.592 21 3 28.638 21 7 44.977 21 7 25.402	37.965 31.717 50.616	8 51.074 41.338 34.796 56.253 31.237	53.113 44.710 37.876 61.889 34.155	<ul> <li>57</li> <li>6</li> <li>86</li> <li>38</li> </ul>	+47 17 9.58 -17 28 20.67 - 0 20 46.83 -70 22 22.58 + 9 53 19.94	17 23.62 28 6.40 20 32.43 22 7.97 53 34.42	17 37.66 27 52.11 20 18.02 21 53.35 53 48.89	17 51.71 27 37.83 20 3.61 21 38.72 54 3.37	+ 5 - 54 + 15 - 32 -151
1556 1557 1558 1559 1560	58 G. Micr 24 G. Indi 5 Cygn U Cygn Grb 3434	21 9 44.093 21 13 47.900 21 15 3.396 21 15 26.892 21 17 44.881	47.651 51.989 5.752 29.358 46.809	51.209 56.078 8.108 31.824 48.738	54.767 60.166 10.464 34.291 50.667	+ 73 - 24 - 4 + 6 + 6	-27 51 54.98 -48 58 7.77 +39 8 32.61 +34 38 38.77 +52 48 12.33	51 40.33 57 52.85 8 47.68 38 53.86 48 27.56	51 25.68 57 37.92 9 2.75 39 8.96 48 42.79	51 11.03 57 22.99 9 17.83 39 24.06 48 58.02	-116 - 79 - 2 - 2
1561 1562 1563 1564 1565	ι Capr 18 Aqar γ Indi 2 G. Pegs 2 Pegs	21 18*54.481 21 20*54.865 21 21*59.437 21 25 27.329 21 27 13.673	57.822 58.144 63.720 30.286 16.391	61.162 61.422 68.004 33.244 19.108	64.503 64.700 72.286 36.201 21.825	+ 22 + 60 + 8 + 4 + 13	-17 5 28.21 -13 8 11.78 -54 55 15.12 + 7 56 1.18 +23 22 29.91	5 12.91 7 56.36 54 59.61 56 16.80 22 45.67	4 57.61 7 40.94 54 44.09 56 32.43 23 1.43	4 42.30 7 25.52 54 28.57 56 48.06 23 17.19	+ 6 + 11 + 46 - 32 + 6
1566 1567 1568 1560 1570	6 PscA 3 G. Grus ρ Cygn ξ Aqar 5 Pegs	21 28 37.158 21 29 30.715 21 31 43.279 21 34 33.519 21 34*56.867	40.789 34.605 45.535 36.712 59.674	44.419 38.495 47.791 39.906 62.481	48.050 42.384 50.047 43.099 65.288	+ 6 - 18 - 25 + 74 + 70	-34 12 36.25 -45 6 54.01 +45 19 33.26 -8 7 27.25 +19 2 52.01	12 20.42 6 38.14 19 49.16 7 11.13 3 8.19	12 4.59 6 22.26 20 5.07 6 55.00 3 24.37	11 48.76 6 6.38 20 20.97 6 38.88 3 40.56	- 3 - 4 - 90 - 22 + 16
1571 1572 1573 1574 1575	÷35° 4626 v Ceph 13 G. Grus 11 Pegs 14 Pegs	21 43 11.700 21 43 42.965 21 44 22.148 21 44 11.397 21 47 11.256	14.243 44.696 26.053 14.439 13.910	16.787 46.426 29.957 17.481 16.563	19.330 48.157 33.860 20.523 19.217	+ 75 - 7 +158 <sup>1</sup> ) + 5 + 10	+35 34 47.43 +60 50 36.44 -47 34 39.42 + 2 24 28.24 +29 53 38.73	35 4.02 50 53.05 34 23.08 24 44.87 53 55.47	35 20.62 51 9.65 34 6.73 25 1.51 54 12.22	35 37.22 51 26.26 33 50.39 25 18.14 54 28.98	$   \begin{array}{r}     + 17 \\     + 2 \\     -295 \\     + 5 \\     - 23   \end{array} $
1576 1577 1578 1579 1580	127 G. Capr µ Capr Br 2880 Pi 21 <sup>h</sup> 339 98 G. Aqar	21 50 1.596 21 52 5.398 21 53 35.505	4.867 6.102 38.309	66.758 8.137 6.806 41.114 53.504	70.173 11.408 7.509 43.919 56.632	+253 +211 + 79 - 3 - 4	-23 33 2.74 -13 50 6.37 +73 25 6.04 +20 57 14.34 - 4 39 22.72	32 46.02 49 49.45 25 23.07 57 31.43 39 5.80	32 29.29 49 32.52 25 40.10 57 48.52 38 48.88	32 12.56 49 15.60 25 57.14 58 5.61 38 31.96	$ \begin{array}{r} -84 \\ +13^{2}) \\ +31 \\ +19 \\ -254 \end{array} $
1581 1582 1583 1584 1585	λ Grus 125 G. Aqar 1 H. Lacr 47 Aqar π Aqar	22 2 30.321 22 11 23.389 22 11 17.970 22 18 17.584 22 22 12.743	33-939 26.637 20.545 20.888 15.806	37.556 29.885 23.120 24.191 18.870	41.173 33.133 25.695 27.493 21.934	- 18 - 8 + 33 - 5 + 10	-39 50 1.29 -16 6 39.47 +39 24 59.80 -21 53 58.78 + 1 4 20.21	49 43.93 6 21.99 25 17.65 53 40.76 4 38.46	49 26.58 6 4.50 25 35.49 53 22.74 4 56.71	49 9.22 5 47.02 25 53.34 53 4.72 5 14.97	-114 -352 + 11 - 84 + 4
1586 1587 1588 1589 1590	Pi 22 <sup>h</sup> 97 72 G. Indi 36 Pegs Pi 22 <sup>h</sup> 120 38 Pegs	22 22 46.812 22 24 14.207 22 26 8.242 22 26 21.340 22 27 16.924	18.635 11.236 24.151	52.601 23.062 14.231 26.961 22.411	55.495 27.488 17.225 29.772 25.155	+ 13 +277 + 36 + 15 + 25	+18 8 18.95 -67 47 40.28 + 8 49 19.48 +26 27 21.09 +32 15 53.94	8 37.26 47 22.03 49 37.85 27 39.48 16 12.35	8 55.57 47 3.77 49 56.22 27 57.87 16 30.77	9 13.88 46 45.51 50 14.60 28 16.26 16 49.19	+ 39 - 65 - 15 - 5 - 12
1591 1592 1593 1594 1595	σ Aqar β Psc A ρ Ceph Grb 3834 κ Aqar	22 27 28.378 22 28 5.951 22 29 22.032 22 31 13.410 22 34 38.955	9.364 22.569 14.464 42.062	34.727 12.776 23.106 15.518 45.168	37.902 16.188 23.642 16.571 48.275	+ 53 - 13 - 69 - 48	-10 59 8.29 -32 39 15.29 +78 30 58.65 +75 55 1.52 -4 32 16.94	58 49.89 38 56.85 31 17.13 55 20.08 31 58.39	58 31.48 38 38.40 31 35.62 55 38.63 31 39.83	58 13.07 38 19.94 31 54.10 55 57.19 31 21.26	- 27 - 6 - 14 - 2 -112
1596 1597 1598 1599 1600	45 Pegs 68 Aqar -2° 5826 69 G. Grus ÷36° 4956	22 42 32.863 22 44 19.903 22 44 24.393 22 47 37.611 22 52 14.924	23.126 27.482 41.028	38.698 26.349 30.571 44.444 20.503	41.616 29.571 33.661 47.860 23.293	- 24 - 73 + 3 + 18 + 70	+19 2 59.19 -19 55 36.44 - 2 6 19.12 -39 28 30.29 +36 45 23.81	3 18.16 55 17.68 6 0.16 28 11.24 45 43.00	3 37·14 54 58.91 5 41.19 27 52.19 46 2.19	3 56.11 54 40.15 5 22.22 27 33.14 46 21.38	+ 63 -198 + 3 - 7 + 15

<sup>1)</sup>  $\mu$  ab 1942.0: +0.0159 2)  $\mu'$  für 1943.0: +0.014

#### Zusatzsterne des FK3 für 1940.0-1943.0

_		Re	ktaszei	nsion		μ		Deklina	tion		μ′
Nr.	Name	1940	1941	1942	1943	in o.ooo1	1940	1941	1942	1943	in o001
1601 1602 1603 1604 1605	π PscA β Pisc 55 Pegs 5 Andr t Grus	h m s 23 .0 10.864 23 0 49.337 23 3*58.801 23 5 1.425 23 6*58.180	8 14.185 52.389 61.823 4.149 61.578	8 17.505 55.442 64.845 6.873 64.975	20.825 58.495 67.866 9.597 68.372	+53 + 6 + 5 + 152 + 124	-35 4 27.08 + 3 29 48.03 + 9 5 6.11 +48 58 7.30 -45 34 19.11	4 7.62 30 7.40 5 25.55 58 26.91 33 59.61	3 48.17 30 26.78 5 44.99 58 46.52 33 40.12	3 28.71 30 46.16 6 4.43 59 6.13 33 20.63	+ 89 - 3 - 8 +139 - 18
1606 160 <del>7</del> 1608 1609 1610	59 Pegs φ Aqar ψ¹ Aqar ψ³ Aqar 12 Andr	23 8 42.322 23 11 12.903 23 12 44.922 23 15 50.446 23 17*59.124	45.351 16.010 48.065 53.567 62.018	48.379 19.117 51.209 56.687 64.912	51.408 22.224 54.352 59.808 67.807	- 7 + 24 +251 + 30 +103	+ 8 23 38.24 - 6 22 21.89 - 9 24 53.78 - 9 56 20.48 +37 51 15.99	23 57.78 22 2.49 24 34.17 56 0.80 51 35.64	24 17.33 21 43.09 24 14.56 55 41.13 51 55.28	24 36.87 21 23.68 23 54.95 55 21.45 52 14.92	- 1 -190 - 11 + 4 - 66
1611 1612 1613 1614 1615	98 Aqar 67 Pegs 9 Pisc +15° 4830	23 18 3.875 23 19 49.269 23 21*54.290 23 24*55.370 23 26 0.945	7.073 52.420 57.225 58.413 3.963	10.270 55.571 60.161 61.456 6.981	13.467 58.722 63.097 64.499 9.999	- 10 - 87 + 8 - 84 + 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	18 36.53 25 22.32 3 37.93 3 16.87 41 14.60	18 16,83 25 2,68 3 57.7° 3 36.64 41 34.43	17 57.14 24 43.03 4 17.47 3 56.41 41 54.27	- 12 - 88 + 4 - 39 + 9
1616 1617 1618 1619 1620	15 Andr ι Phoe μ Scul κ Andr λ Pisc	23 31 41.029 23 31*51.215 23 37 29.455 23 37 26.709 23 38*59.020	43.963 54.444 32.604 29.663 62.081	46.898 57.672 35.752 32.617 65.142	49.832 60.900 38.901 35.571 68.203	- 15 + 35 - 74 + 73 - 88	+39 54 19.88 -42 56 49.13 -32 24 17.87 +44 0 5.83 + 1 26 59.33	54 39.73 56 29.23 23 57.97 0 25.76 27 19.15	54 59.59 56 9.33 23 38.07 0 45.70 27 38.97	55 19.44 55 49.43 23 18.17 1 5.63 27 58.78	- 38 + 8 - 49 - 15 - 143
1621 1622 1623 1624 1625	106 Aqar \$\psi\$ Andr 20 Pisc Pi 23h 194 82 Pegs	23 41 5.439 23 43 3.143 23 44*51.411 23 46 19.796 23 49 33.331	8.551 6.114 54.495 22.901 36.391	9.086 57.579 26.006 39.451	14.774 12.058 60.663 29.110 42.511	+ 19 + 6 + 60 - 3 - 16	-18 36 35.97 +46 5 13.63 - 3 5 42.64 -21 56 52.03 +10 36 48.62	36 15.99 5 33.62 5 22.63 56 32.01 37 8.65	35 56.01 5 53.60 5 2.62 56 11.99 37 28.68	35 36.02 6 13.59 4 42.61 55 51.97 37 48.71	+ 6 - 1 + 12 + 12 + 7
1626 1627 1628 1629 1630	27 G. Phoe Grb 4163 Pi 23 <sup>h</sup> 235 ψ Pegs 30 Pisc	23 51 30.110 23 51*53.010 23 53 37.808 23 54 41.800 23 58*52.953	33.258 55.916 40.864 44.856 56.030	36.405 58.822 43.920 47.912 59.107	39.552 61.729 46.977 50.969 62.185	+320 - 26 - 16 - 27 + 34	-40 38 4.40 +74 4 34.91 +22 18 51.29 +24 48 28.65 - 6 20 50.85	37 44-33 4 54-94 19 11.33 48 48.66 20 30.84	37 24.27 5 14.97 19 31.37 49 8.67 20 10.83	37 4.21 5 35.00 19 51.41 49 28.68 19 50.82	+ 34 - 1 + 4 - 25 - 33

27		R	ektasze	nsion		μ	Deklination				μ'
Nr.	Name	1940	1941	1942	1943	in o.ooi	1940	1941	1942	1943	in o″ooi

#### Nördliche Polsterne

Να Νβ Νγ Νδ Νε	Br 256 Br 402 +85° 74 Grb 944 Grb 1359	1 m s - 7 20.52 3 17* 44.70 5 10* 17.26 5 42* 25.65 8 2* 49.86	58.79 38.49 44.50	38.74 72.90 59.73 63.36 78.74	47.86 88.02 80.99 82.22 93.16	+39 +57 +24 +12 - 8	+83 16 55.10 +84 42 15.26 +85 52 59.57 +85 10 13.37 +84 14 14.36	17 12.09 42 28.16 53 3.79 10 14.89 14 4.10	17 29.07 42 41.04 53 7.98 10 16.39 13 53.81	17 46.04 42 53.90 53 12.14 10 17.86 13 43.50	$-40^{1}$ ) $-129$ $-81$ $+3$ $-22$
Nζ Nη Nθ Nι Nκ	+84° 196 +86° 161 Grb 1850 Grb 2063 Grb 2196	9 3 10.75 11 7 36.17 12 1 41.26 13 43 57.74 14 54 14.15	23.38 43.49 44.14 56.03 10.07	36.00 50.79 47.02 54.32 6.00	48.60 58.08 49.90 52.62 1.93	+18 -41 -50 +21 +90	+84 25 34.70 +85 57 58.92 +85 55 10.38 +83 3 13.63 +82 45 34.81	25 20.34 57 39.40 54 50.42 2 55.57 45 20.05	25 5.96 57 19.87 54 3°.47 2 37.5° 45 5.29	24 51.57 57 0.35 54 40.52 2 19.43 44 55.52	+ 9  • 2)  + 88  - 48  - 233 <sup>3</sup> )
Nλ Nμ Nν Nξ No	Grb 2315 Br 2412 Grb 3212 32 H. Ceph 36 H. Ceph V Ceph	15 49 30.57 18 31* 67.01 20 7* 80.61 22 18 21.45 22 54 57.74 23 53 35.81	59.10 71.91 16.75 57.29	18.05 51.18 63.21 12.03 56.84 41.41	11.80 43.27 54.49 7.29 56.39	+ 4 + 6 - 9 +50 +58 +26	+83 7 51.84 +83 8 5.37 +84 29 50.84 +85 48 25.67 +84 I 31.13 +82 51 25.84	7 41.03 8 8.13 30 1.44 48 43.82 1 50.40 51 45.89	7 30.21 8 10.88 30 12.03 49 1.97 2 9.68 52 5.94	7 19.38 8 13.62 30 22.61 49 20.12 2 28.95 52 26.00	- I - 3I - 4I + 49 + 33 + 18

#### Südliche Polsterne

Sα Sβ Sγ Sδ Sε	o Octn Lac 1029 Lac 1848 12 G. Mens 31 G. Mens	h m s 0 12 16.55 2 29 32.36 2 41 *101.99 4 29 43.40 5 41 46.92	16.53 23.88 73.71 36.37 35.29	16.53 15.42 45.59 29.34 23.67	16.53 6.99 17.62 22.32 12.04	$+46^{1}$ ) $+1$ $-48$ $-10$ $-9^{3}$ )	-85 59 12.01 -88 24 37.63 -83 1 55.49	41 27.65 58 56.10 24 22.43 1 47.79 49 13.24	41 7.63 58 40.18 24 7.21 1 40.08 49 11.58	23 51.97 1 32.37	$\begin{array}{cccc} + & 3 & & & \\ - & 21 & & & \\ - & 22^2) & & & \\ + & 2 & & & \\ + & 48 & & & \end{array}$
ST SH SH Si Sx	6 G. Octn 7 G. Octn A Octn 10 G. Octn η Octn	5 54*100.29 7 7* 88.73 7 18*201.21 10 34 44.24 10 59 46.86	150.42	68.83 47.04 99.48 37.19 45.99	53.11 26.17 48.40 33.65 45.55	-15 +10 -10 -2 -44	-85 55 55.96 -86 56 29.95 -88 39 54.93 -85 46 49.10 -84 16 16.01	55 55.56 56 35.84 40 1.85 47 7.77 16 35.37	55 55.15 56 41.69 40 8.69 47 26.44 16 54.73	56 47.51 40 15.47	+ 4 + 3 + 15 + 4 - 5
Sλ Sμ Sν Sξ So Sπ	ν Octn ρ Octn 44 G. Octn 48 G. Octn B Octn υ Octn	13 30* 49.47 15 29 8.33 19 45 5.24 20 28* 37.09 22 13* 40.32 22 20* 44.38	22.04 16.34 51.49 82.45	68.57 35.76 27.43 65.88 124.13	78.14 49.49 38.52 80.25 165.35	-67 +91 + 5 +36 +61	-85 28 49.24 -84 16 14.05 -81 30 17.53 -84 36 59.52 -89 7 36.57 -86 16 29.72	29 7.75 16 26.22 30 8.65 36 47.42 7 18.67 16 11.47	29 26.26 16 38.36 29 59.76 36 35.31 7 0.74 15 53.20	16 50.50 29 50.85 36 23.18 6 42.80	- 22 + 90 + 1 - 20 - 41 + 62

<sup>1)</sup>  $\mu$  ab 1942.0: +0.045 2)  $\mu'$  ab 1942.0: -0.021 3)  $\mu$  für 1943.0: -0.008

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